ARIZONA JOB SEEKERS

GUIDE

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The *Arizona Job Seekers Guide* is one of four publications produced by the Arizona Department of Economic Security (DES), Research Administration, designed to assist out-of-state job seekers. Companion publications include two *Major Employer Guides*, which cover the Phoenix metropolitan area (RS-607), and the cities of Tucson, Flagstaff, and Yuma (RS-608); and the *Arizona Labor Market Information Directory* (PAL-158).

One copy of each publication is available at no cost by contacting:

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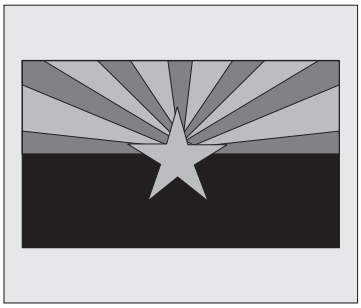
The *Arizona Job Seekers Guide* provides general information on working and living conditions in the "Grand Canyon State," as well as references to other sources of job-search information. Groups that should find the publication helpful include students planning career paths, recent high school and college graduates, those considering career changes, and out-of-state residents pondering a move to Arizona. By reviewing similar publications from other states, along with other available data (see "Other Job-Search Sources," page 35), job seekers can make more-educated decisions about whether Arizona provides the right employment opportunities.

For easy reference, the *Arizona Job Seekers Guide* is organized into four major sections: "Arizona Overview," "Communities in Brief," "Economic Overview," and "Other Job-Search Sources."

The first section, "Arizona Overview," gives a glimpse of the state's history, geography and climate, demographic and employment characteristics, and general working conditions. "Communities in Brief" provides background information – population, industrial makeup – on Arizona's two major metropolitan areas (Phoenix and Tucson) and larger communities in rural parts of the state. The third section, "Economic Overview," examines recent trends in Arizona's industries and occupations. Among topics covered in this section are: recent rates of industry employment and wage growth; major job-expansion announcements; and the state's occupational outlook, highlighting the many opportunities for employment. The final section, "Other Job-Search Sources," provides a number of additional resources to aid in the job search, including lists of Arizona One-Stop Career Center offices and the state's daily newspapers.

Historical Perspective

It is thought that the first people to live in Arizona came from Asia, reaching North America via a land bridge over what is now the Bering Strait. The early arrivals settled near water and many constructed canals to irrigate their crops. These people domesticated animals; made pottery, baskets, and textiles; and some even mined for precious metals. They also built homes, some of stone in cliffs and some made of adobe (sun-baked mud bricks). Settled in the 12th century on the Hopi Indian reservation in the northeast plateau, Oraibi is the oldest continually inhabited community in North America.



Several centuries later, the Spanish Conquistadors entered the arid Southwest seeking missionary converts and the fabled "Seven Cities of Cibola," with its gold-paved streets. However, the Spanish had to first "settle" for discovering silver, finding the less-precious metal in 1582. A century later, these Europeans founded their first town in Arizona, Tubac, near Tucson in southeastern Arizona.

According to many historians, the name "Arizona" has its roots in a Papago Indian settlement called "Ali Shonac," or "place of the small spring." The Spaniards discovered silver and other minerals and shipped them from a location near the Indian settlement they called "Arizonac." Over the years the "c" was dropped and the name became Arizona – reflecting its Indian, Spanish, and mining heritage.

Following the Mexican Revolution in 1811, Mexico broke away from Spain, becoming a republic and creating the Territory of Nuevo (New) Mexico, which included most of what is now Arizona. Then in 1848, a treaty following the Mexican-American War established the New Mexico Territory as part of the United States. Two years later the Compromise Act split New Mexico into two territories, with all land north of the Gila River (just south of what is now Phoenix) becoming Arizona. In 1853, through the Gadsden Purchase, land south of the Gila River became part of Arizona. A half-century later – on February 14, 1912 (Valentine's Day) – Arizona became the 48th state of the union.

Industrial Development

The presence of gold, silver, and copper in Arizona was the primary force in the industrial development of the state in the late 19th and early 20th centuries. Early efforts to mine gold soon gave way to the search for silver, and Arizona's standing as a producer of mined products was established.

Because copper deposits were often found in proximity to silver, some gold and silver mining firms evolved into copper producers. Founded in 1872, the Morenci-Clifton District was the state's first successful copper mining operation. Mining quickly established itself as Arizona's most important industry, employing 21 percent of the state's labor force by 1880. By 1896, total mineral output reached $14 million, compared to total output for the state's stock and agriculture industries of $3 million and $2 million, respectively.

In 1869, when the city now known as Phoenix was about to be named Pumpkinsville, or Stonewall, Brian Phillip Duppa declared that a new civilization was rising – like the mythological Phoenix bird – from the ashes of the past. For most of its existence, Phoenix and the surrounding Salt River Valley was an agricultural center, thanks to an elaborate system of canals first developed by ancestors of Arizona's current Indian tribes, then expanded to irrigate a wide variety of crops. Ironically, one of those crops – long-staple (Pima) cotton – helped lead to the area's rapid industrialization during World War II, when a shortage of rubber forced the need to use Pima cotton for tire production. A half-century later, metropolitan Phoenix has transformed itself, becoming a leading center of business and cultural activities in the Southwest.

One hundred miles to the south is Arizona's second largest city, located at the base of the Catalina Mountains (hence the Indian name Tucson, "at the foot of the dark hill"). Founded in the late 1700s, Tucson was at one time the main hub of activity in the state. It was originally created as a fortress against Indian attacks and later became the state's first territorial capital and home to the state's first university. And while at one time the University of Arizona dominated Tucson's economic activity, today the "Old Pueblo" is a dynamic metropolitan area with a diversified economy. (For a more detailed description of the Phoenix and Tucson metropolitan areas, see the "Communities in Brief" and "Economic Overview," pp. 7 and 21, respectively.)

In its second decade of statehood, Arizona saw tourism establish itself as a major industry. Winter re-

sorts became the foundation of the industry and grew rapidly as technological advancements were made in transportation. The Castle Hot Springs resort near Wickenburg, which opened in 1896, was one of the first Arizona hotels catering primarily to winter visitors. Since then, many other resorts and winter tourist facilities have sprung up around Phoenix and Tucson and in other areas of the state. The industry became formidable to the extent that it endured, better than most, The Depression in 1929.

Although the Depression did severely impact Arizona's economy, many public-service jobs created to build dams and roads for the fledgling state, to some extent, offset the Depression's effects. The economy struggled, however, until World War II jolted the nation and Arizona out of its economic slump.

But by far the biggest factor that fueled the state's rapid growth since World War II was the widespread availability of air-conditioning in the 1950s. A rapidly expanding population provided labor for manufacturers that, in ever-greater numbers, brought their operations to the state. With the expansion of companies such as Motorola and Honeywell into the state during the 1950s, the electronics industry proved to be a major force behind a burgeoning manufacturing industry. Today, electronics companies – in fields such as computer technology and aviation – are the backbone of Arizona's manufacturing industry.

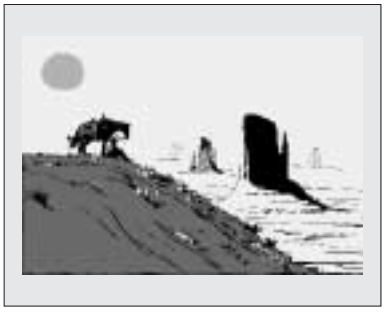
A rapidly expanding population has contributed to strong growth in service-producing industries, such as health care, retail trade, restaurants, finance, real estate, transportation, communications, public utilities, and government. Today, service-producing industries (all major industries except agriculture, mining, construction, and manufacturing) account for more than eight of every 10 Arizona jobs.

Geography, Climate, Recreation

Arizona is a unique corner of our country and world. Larger than 44 other states, its size alone (113,417 square miles) sets the state apart. One of the state's 15 counties, Coconino, is as large as New Hampshire, New Jersey, and Delaware combined. At the summit of the San Francisco Peaks near Flagstaff is Arizona's highest point, Humphreys Peak, which rises nearly 13,000 feet above sea level. In contrast, the waterfront on the Colorado River near Yuma is 70 feet above sea level.

Less than one-fifth of Arizona's land is privately owned. One-quarter is reserved for the state's 16 Native American tribes, with the balance held in trust or reserved for the U.S. Forest Service, U.S. Bureau of Land Management, the state of Arizona, and the military.

Arizona has three basic geographic regions and each has its own climatic characteristics. There is a region of high mountains and narrow valleys stretching from the northwest corner near the Nevada border through the center of the state to the New Mexico border. Temperatures in this region range from below zero in the winter to more than 90 degrees in the summer. Annual precipitation averages 20 inches and supports the region's expansive forests and grassy meadows. Some mountainous areas receive more than 12 feet of snow annually, providing excellent skiing conditions.



The plateau region of Arizona spreads northeast from the band of mountains that cuts diagonally across the state. It is an area of high elevation mesas and plateaus and is separated dramatically from the mountain region by the magnificent Marble Canyon on the west and the Mogollon Rim (pronounced Mo-gee-on) which runs through the center of the state. It is in this area that Arizona's largest Indian reservations are found. Temperatures are more moderate here because of the mile-high elevation. Precipitation amounts to less than 10 inches annually, with a small amount falling as snow.

The desert region of Arizona lies to the south of the mountain region. It is in this area that the state's two largest metropolitan areas, Phoenix-Mesa (Maricopa and Pinal counties) and Tucson (Pima County), are found. The desert region is characterized by isolated mountains rising abruptly out of low, broad valleys and plains. Here, the mountain's forest of conifers gives way to clusters of statuesque saguaro cactus that, in the minds of many, have come to symbolize the American Southwest.

Temperatures in the desert region normally range from slightly below freezing on winter nights to more than 110 degrees during the heat of the summer days. In Phoenix, the average high and low in July is 106 and 80 degrees, respectively, and in December, 66 and 42. Annual precipitation in Phoenix is about 8 inches. Tucson temperatures are slightly lower because of the city's higher elevation and precipitation is about 12 inches per year. (For details on geography and climate of other cities, see "Communities in Brief," p 7.)

In addition to attracting newcomers with the pros-

pect of finding jobs, Arizona tempts many with its warm climate and lifestyle. One in seven Phoenix homes and one in 10 Tucson homes have a private swimming pool. Tennis courts, racquet clubs, and golf courses dot the landscape.

Recreational and sports activities abound in Arizona. Although largely desert, Arizona has more recreational boats and golf courses per capita than any other state. Large man-made lakes, the Colorado River, and the nearby Gulf of California offer water-related recreation, while extensive mountain forests provide camping, hiking, fishing, and hunting opportunities, as well as three snow-skiing facilities.

Hiking, bicycling, picnicking, and fishing are but a few of the activities that are also offered in Arizona's state and city parks. In fact, South Mountain Park in Phoenix is the largest municipal park in the United States – larger than Golden Gate Park in San Fran - cisco and Central Park in New York City. And the one-mile, 1,000-foot ascension along the Squaw Peak trail in north Phoenix is one of the most heavily traveled intercity hiking paths in the country.

Arizona also offers a variety of participatory and spectator sports activities. Tennis, racquetball, golf, and baseball are popular and played year-round in the desert. Baseball and softball leagues are offered for all ages, as well as football and soccer leagues for children. Lakes and public and private pools satisfy the swimming enthusiast.

Population

Between 1990 and '98, Arizona's population increased by nearly one-third – from 3.7 million to 4.8 million – an annual growth rate of 3 percent, the second largest increase among all states. Much of this increase was the result of in-migration, particularly from California, Texas, New Mexico, Colorado, and Illinois.

Although Arizona is well-known for its retirement lifestyle and communities, the average age of the state's 3.7 million residents in 1990 was slightly less than the country as a whole. According to the 1990 Census, the median age (half are younger, half are older) of Arizona residents was 32.2, compared to the U.S. median of 32.9. While Arizona is the sixth largest state in land area, it was 24th in population in 1990, with 32.3 people per square mile. (In '98, Arizona's estimated population of 4.8 million ranked 21st in the U.S.) Whereas population is fairly evenly distributed in most states, more than three-quarters of Arizona's residents live in the two major metropolitan areas. In fact, the Phoenix-Mesa metro area alone accounts for nearly 62 percent of the state's population.

Despite having more Indian reservations than any other state, Native Americans comprised only 6 percent of Arizona's population in 1997. According to the '90 Census, the ethnic breakdown of Arizona's population was as follows: white (not Hispanic), 72 percent; Hispanic, 19 percent; American Indian, 5 percent; black, 3 percent; Asian and Pacific Islander, 1 percent; and "other," less than 1/10th of a percent. Since the '90 Census, however, Hispanics increased their numbers significantly, comprising an estimated 22 percent of Arizona's population in 1997. At the same time, the white (not Hispanic) population expanded more slowly and its share of the state's population declined to 69 percent in '96.

Schools

Primary and secondary school districts in Arizona have generally met the demand of rising enrollments. Some rapidly expanding communities, however, challenge their district's abilities to keep pace, while declining enrollments in other districts are resulting in school closures.

The state's three major universities, which had a combined enrollment of 101,000 in 1998, include Arizona State University's three campuses in metro Phoenix (47,000); University of Arizona in Tucson (34,000); and Northern Arizona University in Flagstaff (20,000). Fifteen additional private colleges and universities are licensed to operate in Arizona.

Arizona's Community College System, which was established in 1960, had an enrollment of more than 150,000 students in 1998 at 19 schools (and 38 campuses) throughout the state. The Maricopa Community College School District, comprised of 10 schools in the metropolitan Phoenix area, has the second-largest community college enrollment in the nation. The state's Community College System offers more than 100 two-year degrees in fields such as

cosmetology, aviation, health care, real estate, fine arts, computers and related technology, and automobile repair.

For a detailed list of curricula offered by Arizona schools, contact the Arizona Commission for Postsecondary Education (see "Other Job-Search Sources").

Job-Search Assistance

Some employment-related services are available immediately upon declaring Arizona residency, while others are not. For example, Job Service facilities in Arizona are open to all residents, including new arrivals who intend to make Arizona their home. On the other hand, eligibility for unemployment insurance (UI) benefits, while trying to find work in Arizona, is dependent upon UI regulations in the state the job seeker left (see below).

Arizona's Job Service offices, which are funded by the U.S. Department of Labor, have detailed information on about 15 to 20 percent of available jobs in the state. Because of this limited information, Job Service should be viewed as only *one source* of employment information – perhaps a starting point. Also, specific assistance from Arizona Job Service counselors is not provided to nonresidents. Out-of-state job seekers will usually receive general information about the state's job picture, but not specific job listings, and often are referred to the DES, Research Administration for an overview of the employment situation. However, a national data base of Job Service job listings (including Arizona's) is available on the Internet at: http://www.ajb.dni.us/. In addition, DES, Research Administration annually publishes an *Arizona Labor Market Information (LMI) Directory*, which provides a wealth of job-search source material.

Job seekers who move to another state to look for work are often eligible to continue receiving UI benefits. Because benefits are paid by the originating state, it is that state's UI office that must determine eligibility. Determination of benefit eligibility often hinges on whether a job seeker has a reasonable chance of finding a job in one's present or related line of work, or in an occupation that requires previously acquired skills.

Other job-search resources (many of which are free) are available to Arizona residents, including services provided by community colleges, One-Stop Career Centers, professional groups, and associations and unions. Refer to the last section of this publication, "Other Job-Search Sources," or the *Arizona Labor Market Information Directory*, for more information.

About this Section

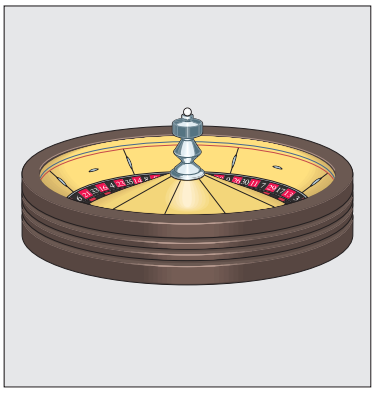
This section provides a thumbnail sketch -includ - ing population and geographic data – for the largest and fastest growing areas in the state. Particularly important to job seekers may be cost-of-living data from the American Chamber of Commerce Research Association (ACCRA), which provides an affordability comparison for Arizona cities and other cities in the West. Also, at the end of this section there is an analysis of real estate trends in the Phoenix and Tucson metropolitan areas – which together account for more than 80 percent of the state's population and job opportunities.

Some of the information in this section was excerpted from *Community Profiles*, an annual publication produced by the Arizona Department of Commerce. Community descriptions are provided in alphabetical order, not in order of importance. Consult other sources (i.e., newspapers) listed in the final section of the *Arizona Job Seekers Guide* to obtain information on communities not included in this section.

Community Briefs

Bullhead City

Located in northwestern Arizona on the Colorado River, Bullhead City has gained national prominence in recent years due to two phenomena: its hot temperatures, and even hotter job growth. Bullhead City is often cited as the "hot spot" in the country when temperatures soar to nearly 120 degrees in the summer. And the home of a power-generating station and the third largest dam (Davis) on the Colorado River has more recently benefitted as an across-the-river neighbor of gambling "boom town" Laughlin, Nev.



Most people working in Laughlin's casinos live in Bullhead City because much of the land on the Nevada side of the river is government-owned. Between 1980 and '90, Bullhead City's population doubled and by 1998 reached nearly 29,000.

Bullhead City, which has a community college, hospital (90 beds), and an airport that handles scheduled daily jet service, is 30 miles west of Kingman and 175 miles west of Flagstaff. Las Vegas is about 100 miles to the north.

Casa Grande

Located 45 miles south of Phoenix, this town of about 22,000 is beginning to reap the benefits of its location near several transportation corridors. Named after nearby Indian ruins, Casa Grande has been primarily an agricultural center. More recently, however, its economy has become more diversified and includes manufacturing, tourism, and the recent establishment of factory-outlet centers.

At an elevation of 1,398 feet, temperatures in January range between 32 and 67 degrees; in July, between 75 and 107. Average rainfall is 8 inches. Casa Grande has two hospitals (244 beds), a community college, and a municipal airport.

Douglas

Located directly across from Agua Prieta, Mexico, the city of Douglas was founded in 1901 as the site of a major copper smelter, which along with ranching, dominated the town's existence for most of its nearly 100 years. But with the smelter's closure in the mid-1980s, tourism and manufacturing have become increasingly important.

Sitting 4,000 feet above sea level, Douglas has a moderate climate, with average daily maximum and minimum temperatures of 92 degrees and 65 degrees, respectively, in July; and 60 degrees and 28 degrees, respectively, in January. Average rainfall is about 13 inches. Douglas has one hospital (120 beds), branches of a community college and the University of Arizona, and an airport that can accommodate small jets.

Nearby attractions include the mining and "Old West" towns of Tombstone and Bisbee, and several national forests, which provide hunting, fishing, and bird-watching opportunities.

Flagstaff

The largest city in northern Arizona, the mountain community of Flagstaff is located 140 miles due north of Phoenix at the intersection of interstates 17 and 40. The city, which sits nearly 7,000 feet above sea level, received its namesake from a "flag staff" erected by loggers who settled the area in late 1800s.

With an estimated population of 60,000 in 1998, Flagstaff accounts for about half of the residents in Coconino county. While not growing as fast as some Arizona cities – due to limited private land and a more restrictive view of growth – Flagstaff's popula -

Table 1

Altitude, Average Yearly Rainfall, and Average High and Low Temperatures (During January, April, July, and October) of Selected Arizona Cities

City	Altitude	Avg. Rainfall	Avg. Temperatures[1] Jan. H	Jan. L	Apr. H	Apr. L	Jul. H	Jul. L	Oct. H	Oct. L
Casa Grande	1,405 ft.	8.2 in.	67	32	75	45	107	75	95	65
Douglas	4,020	12.3	60	28	77	42	92	65	79	46
Flagstaff	6,993	19.3	41	14	57	25	81	50	63	30
Globe	3,540	15.8	55	32	73	46	96	70	78	51
Holbrook	5,069	8.6	47	18	71	35	94	60	74	39
Kingman	3,345	10.6	54	31	71	43	97	68	79	49
Lake Havasu City	482	2.6	67	38	86	53	109	79	91	58
Nogales	3,800	15.6	64	27	77	37	92	63	81	42
Page	4,380	4.8	48	27	77	47	103	72	78	49
Payson	4,910	21.5	53	23	69	33	92	58	75	39
Phoenix	1,117	7.1	65	39	83	53	105	79	87	59
Prescott	5,410	19.3	50	22	65	33	88	57	71	38
Safford	2,900	9.0	59	27	78	42	98	67	82	46
Sierra Vista	4,620	14.5	57	26	72	36	88	60	76	41
Springerville	6,964	12.1	47	20	69	34	92	60	72	40
Tucson	1,150	11.1	67	38	82	50	101	74	87	55
Wickenburg	2,070	11.0	63	31	80	43	104	70	86	48
Yuma	138	2.7	68	43	85	55	106	80	90	61

Note:

1 Degrees in Fahrenheit

Source: Arizona Dept. of Commerce, Tourism Division, 1993

tion nevertheless increased more than 30 percent between 1990 and '98.

Average high and low temperatures in January range from 42 degrees to 15 degrees. In July, temperatures range from a high of 81 degrees and low of 51 degrees. Snowfall in the city is moderate. Flagstaff has one hospital (126 beds), a state university, a community college, and an airport that is serviced daily by several airlines.

Kingman

Located in northwestern Arizona at the intersection of Interstate 40 and U.S. 93, Kingman is nestled in a valley between two rugged desert mountain ranges. An elevation of 3,400 feet provides Kingman, Mohave County's seat of government, with moderate temperatures. January highs average 54 degrees and lows, 31 degrees. July temperatures range from an average high of 97 degrees and low of 68 degrees.

The city receives 9.4 inches of rain annually.

With its proximity to gambling (Laughlin, Las Vegas) and California, this high-desert community has become a "hot spot" for RV visitors in the winter. But its full-time residents have also been on the increase. From 1980 to 1990, Kingman's population grew 37 percent, and expanded 51 percent more between 1990 and 1998.

Kingman has one hospital, which was recently remodeled and expanded; a community college; and an airport with twin-lighted runways.

Lake Havasu City

Best known as home to the historic London Bridge and more recently as a "hot spot" for Spring Break, this western Arizona city on the Colorado River started as a planned community in 1963, before incorporating in 1978. Continuing to attract retirees (for some of the same reasons as Kingman), Lake Havasu City boasted an estimated population of nearly 40,000 in 1998, up 63 percent from the 1990 U.S. Census count.

Average temperatures in January range from a high of 67 degrees to a low of 38 degrees. In July, high temperatures average a toasty 110, but "cool" to a low of about 80 degrees. Rainfall in this low-desert community (elevation 600 feet) averages a meager 4 inches per year.

Lake Havasu City has one hospital (100 beds), a community college, and regularly scheduled airline service.

Nogales

Bordering Mexico at the southern-most end of Interstate 19, Nogales' principle source of employment – and 40 percent of its sales tax – comes from services and trade, with an estimated 50,000 Mexican shoppers crossing daily into Arizona. Founded in 1880 as a trading post, Nogales became the first rail connection between the United States and Mexico two years later. In 1990, Nogales had a population of about 19,500 representing a 10-year growth rate of 24 percent. Its population was an estimated 21,200 in '98, up about 9 percent over 1990.

Nogales is 3,480 feet above sea level and enjoys moderate Arizona temperatures. January days average 64 degrees and the nights average 27 degrees. In July, the highs average 92 degrees and the lows average 63.

Nogales has one hospital (80 beds), a community college extension, and an international airport that recently added a new terminal, with plans for additional expansion.

Payson

Home to Zane Grey and his romantic western novels, Payson has gone from a quaint tourist stop to a thriving resort community in the past decade. Down-home restaurants, convenience stores, and small hotels are now competing with upscale eateries, shopping centers, and resorts, as throngs of tourists and retirees seek the area's clean air, open forests, and recreational activities.

Located in the center of the state, about 100 miles northeast of Phoenix on State Highway 87, Payson sits beneath the majestic Mogollon Rim and the world's largest continuous stand of ponderosa pine trees. At an elevation of 5,000 feet, Payson has a moderate climate with four seasons. January high temperatures average 53 degrees, while lows average 23 degrees. In July, the high averages 92 degrees, while the low averages 58 degrees. Annual average rainfall is about 20 inches, while average snowfall is about 25 inches.

Payson has one hospital and one community college. In 1990, Payson had an official census population of 8,377, up 65 percent from the previous census. The Department of Economic Security estimated its 1998 population at just under 13,000.

Phoenix-Mesa Metro Area

Centrally located within the state, Arizona's largest metropolitan area (Maricopa and Pinal counties), includes more than 40 communities (Table 3), many of which could be metropolitan areas in their own right, and accounts for about two-thirds of the state's labor force (1.51 million out of 2.27 million in 1998). As such, job opportunities are created in many industries throughout the vast economy that comprises this area. (Note: The primary metro area – where most of the jobs are located – takes in about a 50-by-50-mile area radiating out from downtown Phoenix.)

With nearly year-round sunshine, recreational and leisure activities abound in the metro area (also see "Arizona Overview"). The Phoenix area boasts more

Table 2

Top 50 Arizona Places, Ranked in Order of Population by Census Count (1980, 1990) and Estimates (1998)[1]

Places	1998	1990	1980	Pct. Change '90-'98	Pct. Change '80-'90
Phoenix	1,220,710	983,392	789,704	24.1%	24.5%
Tucson	468,520	405,371	330,537	15.6	22.6
Mesa	328,735	361,895	152,404	25.6	89.0
Glendale	196,820	196,820	97,172	33.1	52.2
Scottsdale	195,495	130,075	88,622	50.3	46.8
Chandler	**160,165**	**89,862**	**29,673**	**78.2**	**202.8**
Tempe	159,220	141,993	106,920	12.1	32.8
Peoria	**89,930**	**50,675**	**12,171**	**77.5**	**316.4**
Gilbert	**91,290**	**29,122**	**5,717**	**213.5**	**409.4**
Yuma	68,160	54,923	42,481	24.1	29.3
Flagstaff	59,945	45,857	34,743	30.7	32.0
Sierra Vista	39,995	32,983	24,937	21.3	32.3
Lake Havasu City	39,655	24,363	15,909	62.8	53.1
Prescott	34,610	26,592	19,865	30.2	33.9
Avondole	28,650	16,169	8,168	77.2	98.0
Bullhead City	**28,535**	**21,951**	**10,719**	**30.0**	**104.8**
Oro Valley	**25,455**	**6,670**	**1,489**	**281.6**	**348.0**
Apache Junction	23,005	18,092	9,935	27.2	82.1
Casa Grande	22,340	19,076	14,971	17.1	27.4
Nogales	21,235	19,489	15,683	8.8	24.3
Prescott Valley	**20,465**	**8,904**	**2,284**	**129.8**	**290.0**
Kingmon	19,225	12,722	9,257	51.1	37.4
Surprise	**18,830**	**7,122**	**3,723**	**164.4**	**91.3**
Fountain Hills	**17,280**	**10,030**	**2,771**	**72.3**	**262.0**
Douglas	**15,150**	**13,058**	**13,137**	**16.0**	**0.6**

than 200 miles of designated bicycle trails, offers scores of hiking and camping opportunities, zoos, botanical gardens, countless retail shopping centers, and four major-league sports teams. Downtown Phoenix, which has undergone a renaissance in recent years, boasts theaters, convention centers, museums, and is bordered on the south by the world's largest municipal park.

Daytime highs in January average 65 degrees, while the nights average a low of 39 degrees. In July, the highs average 105 degrees and the lows average 79 degrees. Average annual rainfall is 7.1 inches,

Table 2 (Cont.)

Top 50 Arizona Places, Ranked in Order of Population by Census Count (1980, 1990) and Estimates (1998)[1]

Places	1998	1990	1980	Pct. Change '90-'98	Pct. Change '80-'90
Goodyear	**14,305**	**6,258**	**2,747**	**128.6%**	**127.8%**
Florence[2]	**13,845**	**7,510**	**3,391**	**84.4**	**121.5**
Paradise Valley	**13,315**	**11,773**	**11,085**	**13.1**	**6.2**
Payson	12,780	8,377	5,068	52.6	65.3
Winslow	11,215	9,279	7,921	20.9	17.1
San Luis	**11,090**	**4,212**	**1,946**	**163.3**	**116.4**
Eloy	10,240	7,211	6,240	42.0	15.6
Sedona	9,940	7,720	5,319	28.8	45.1
Safford	**9,465**	**7,010**	**7,359**	**35.0**	**4.7**
Page	9,250	6,598	4,907	40.2	34.5
Globe	**8,020**	**6,062**	**6,886**	**32.3**	**-12.0**
Show Low	7,875	5,020	4,298	56.9	16.8
Cottonwood	7,775	5,918	4,550	31.4	30.1
Coolidge	**7,240**	**6,934**	**6,851**	**4.4**	**1.2**
Chino Valley	7,215	4,837	2,858	49.2	69.2
Somerton	6,625	5,282	3,969	25.4	33.1
Bisbee	**6,525**	**6,266**	**7,154**	**4.1**	**-12.4**
El Mirage	5,855	5,001	4,307	17.1	16.1
South Tucson	**5,705**	**5,171**	**6,554**	**10.3**	**-21.1**
Holbrook	**5,645**	**4,686**	**5,785**	**20.5**	**-19.0**
Guadalupe	5,390	5,458	4,506	-1.2	21.1
Buckeye	5,035	4,436	3,434	13.5	29.2
Wickenburg	4,990	4,515	3,535	10.5	27.7
Tolleson	**4,675**	**4,434**	**4,433**	**5.4**	**0.0**

Notes:

1 Places in bold showed strongest and weakest population trends between 1980 and 1990

2 Population affected by growth in Arizona State Prison population

Source- US. Dept. of Commerce, Bureau of the Census; and Anz. Dept. of Economic Security, Research Administration, 1991 and 1999

with 85 percent of days having some sunshine.

In the Phoenix-Mesa MA, there are 42 hospitals, a major university (Arizona State), a dozen other post-secondary schools, and about 80 private technical and business colleges. Property taxes vary within each community comprising the metro area, but average about $14 per $100 of assessed value.

Table 3

Major Cities, Towns, and Places Comprising Phoenix-Mesa Metropolitan Area[1]

Maricopa County	Litchfield Park
Phoenix	Fountain Hills
Tempe	El Mirage
Scottsdale	Surprise
Mesa	Buckeye
Glendale	Sun City (Unincorp.)
Peoria	Sun City West
Chandler	
Gilbert	**Pinal County**
Guadalupe	Apache Junction
Goodyear	Case Grande
Avondale	Florence

Note:

1 Phoenix-Mesa Metro Area includes Maricopa and Pinal counties

Prescott, Prescott Valley

Until the past decade, the major draw to this majestic mountain community about 100 miles northeast of Phoenix and 90 miles southwest of Flagstaff was its cooler temperatures (elev. 5,347 feet), outdoor activities, and remnants of its days as a mining "boom-town" and Arizona territorial capitol. But that was then and this is now. While tourism (retail trade, services) still produces the most employment opportunities, manufacturing, construction, and government have expanded their roles the past decade.

With the second-coming of a boom-town, the combined population of Prescott and Prescott Valley has skyrocketed, rising 62 percent between 1980 and '90, and jumping an estimated 55 percent between 1990 and 1998. The population of Prescott Valley, alone, more than doubled between 1990 and '98.

The Prescott area's average high temperature in January is 50 degrees; lows average 22 degrees. July temperatures range between an average high of 88 degrees and an average low of 57 degrees. Annual rainfall averages 18 inches, with a small percentage of that falling as snow.

The area has one regional hospital (127 beds) and a Veterans Administration Medical Center, a community college, a four-year college, and Embry-Riddle Aeronautical University.

Sierra Vista

Military operations have always been a part of this southeastern Arizona community's heritage. Sierra Vista, which incorporated in 1956, grew up around Fort Huachuca, which was established in 1877 as a cavalry outpost to protect settlers. Today, the fort protects the entire nation as the headquarters of many of the U.S. Army's communications operations.

Located 70 miles southeast of Tucson and 65 miles east of Nogales, Sierra Vista is situated among some of Arizona's most scenic mountains (Huachuca, Dragoon, Mule, and Whetstone), offering many recreational activities. It's also only a stone's throw from the historical towns of Tombstone and Bisbee, and shopping across the border in Mexico.

Temperatures are moderate to cool for Arizona, with an average high temperature in January of 57 degrees and an average low of 26 degrees. July temperatures range between an average high of 88 degrees and an average low of 60 degrees. Annual rainfall is 15 inches.

With expansion of operations at Fort Huachuca, Sierra Vista's population grew 32 percent between the 1980 and '90 and another 21 percent between '90 and '98.

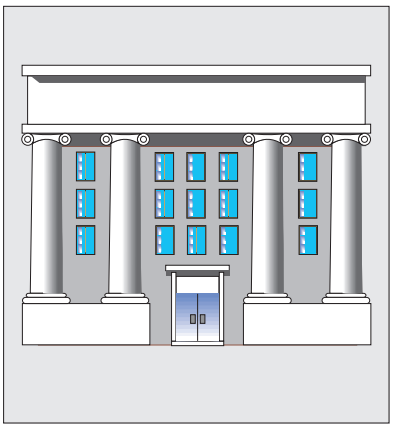
Sierra Vista has two hospitals, one community college, a branch campus of the University of Arizona (see Tucson Metropolitan Area), and a municipal airport with three runways and scheduled air service.

Tucson Metro Area

Arizona's second largest metropolitan area encompasses Tucson and the surrounding Pima County. Located in the southeast portion of the state, Tucson is 110 miles from Phoenix at the junction of interstates 10 and 19.

As mentioned in "Arizona Overview," Tucson is the state's oldest city – founded in 1775 – and has retained much of its mixture of Spanish, Mexican, Indian, and Anglo heritage. According to the 1990 census, 21 percent of Pima County's population was of Hispanic origin.

The city of Tucson had an estimated population of nearly 470,000 in 1998, an increase of 16 percent over 1990. The metropolitan area (Pima County) had an estimated population of 824,000 in '98.



At an elevation of 2,100 feet and abutting a large mountain range (Catalinas), the climate in Tucson is somewhat milder than that in Phoenix (about 1,000 feet lower in elevation). The average high temperature in January is 67 degrees, with lows averaging 38 degrees. July temperatures range between an average high of 101 degrees and an average low of 74 degrees. Tucson's geographic location – next to a mountain range and closer to the southerly flow of moisture that occurs during the summer – also helps produce 80 percent more rainfall than falls in Phoenix to the north. And a slightly higher elevation brings occasional traces of snow to the city, while nearby mountains often have amounts that beckon skiers.

The University of Arizona is Tucson's largest employer with more than 10,000 employees, followed by Davis Monthan Air Force Base with more than 8,000 military and civilian employees. Tourism and manufacturing of high-technology products also are stalwarts of the city's economy.

The Tucson area has 11 hospitals (2,220 beds), including a University Medical Center and College of Medicine. In addition to the University of Arizona, Pima County offers one community college (two branches), a state school for the deaf and blind, one private four-year university, and more than 10 private technical/vocational schools.

Verde Valley

The Verde Valley consists of several small communities on the banks of the Verde River about 100 miles north of Phoenix. At an elevation between 3,000 and 3,500 feet, the climate is more temperate than in Phoenix and Tucson, with an average high in the winter of 58 degrees and a low of about 28 degrees, and average highs and lows in the summer of 95 and 65 degrees, respectively. The Verde Valley receives about 12 inches of rain a year, about equal to Tucson, but twice as much as the Phoenix metro area. In recent years, the Verde Valley has been attracting retirees because of its "four-season" climate and recreational opportunities, which has led to higher home prices.

At the upper end of Verde Valley is the town of Clarkdale, which was founded in 1914 as a service center for the mining community. Lying between two mountain ranges at an elevation of about 3,500 feet, Clarkdale was the site of a major smelter that processed ore from the nearby mining town of Jerome until 1952.

Today, the community of about 2,500 is home to several mid-size manufacturing companies, including one of only two portland cement manufacturing operations in the state. Tourism is another major aspect of Clarkdale's economy, offering many historical sites and a scenic 19-mile passenger tour on the Arizona Central Verde River Canyon Line. In recent years, retirees and families alike have sought out Clarkdale's scenery and milder climate, contributing to the development of a 1,700-home master-planned community in the mid-1990s.

About 20 miles east of Clarkdale is the town of Cottonwood, which received its name because of its proximity to a circle of 16 cottonwood trees near the Verde River. At 3,300 feet, Cottonwood was first used in 1874 as a site for housing soldiers from nearby Fort Verde, but five years later was inhabited and founded by migrating settlers. The town was incorporated in 1960.

Cottonwood, which is largely dependent on tourism, is located near several national forests and monuments and has an "Old Town" area with a number of arts and crafts shops. The town of 6,000 also has a large retirement community, is home to one of northern Arizona's largest hospitals, and has several small manufacturers.

At the eastern edge of the Verde Valley is Camp Verde, which was established in 1865 to protect settlers from Indian raids. Today, the town of 7,500 is a paradise for outdoors enthusiasts with the Verde River offering fishing and river-rafting opportunities, and nearby forests that are home to a variety of animals.

Like Cottonwood, Camp Verde is heavily dependent on tourism. One of its main attractions is nearby Montezuma Castle National Monument, site of some of the best preserved cliff dwellings in the country. Camp Verde also has a number of business interests in construction, ranching, and light manufacturing. A casino is also operated on the nearby Camp Verde Yavapai-Apache Indian Reservation.

Yuma

This southwestern Arizona city that borders the Colorado River was once known for the harsh condi-

Table 4

1999 Median Home Prices and 1998 Property Taxes for Selected Arizona Cities[1]

Cities	Housing	Taxes[2]
Bullhead City	$ 81,650	$12.02
Casa Grande	88,900	16.63
Douglas	49,700	14.86
Flagstaff	NA	9.76
Kingman	79,900	10.22
Lake Havasu City	121,200	10.45
Nogales	96,950	11.75
Payson	119,000	12.22
Metropolitan Phoenix	126,400	14.05
Prescott/Prescott Valley	139,400	10.13
Sierra Vista	NA	12.62
Tucson	117,700	16.90
Verde Valley[3]	NA	11.76
Yuma	98,500	14.92

Notes:

1 New and used homes, excluding mobile homes and condominiums

2 Dollars per $100 assessed value

3 Cottonwood, Clarkdale, and Camp Verde combined

NA = Not Available

tions of its territorial prison, which kept convicts from roaming the West. But in recent years Yuma has been hard pressed to keep visitors away, particularly during winter and spring when tourists flock to this thriving desert community. In 1993, Yuma, combined with its namesake county, became the state's third metropolitan area, thanks to a nearly 30 percent jump in population between 1980 and '90. By 1998, the city of Yuma had an estimated population of 68,000.

Like its neighboring Arizona cities to the north (Lake Havasu City and Bullhead City), summers are not for the timid; Yuma's average mercury reading in July peaks at 106 degrees, before falling to an average low of 80 degrees. In January, highs average 68 degrees and lows, 43 degrees.

In addition to tourism, economic activity in Yuma is heavily influenced by agriculture, which is nearly a billion-dollar industry. The Marine Corps Air Station and Yuma Proving Grounds also contribute substantially to the local economy.

Yuma has one hospital (275 beds) and a half-dozen nursing facilities, a community college, extension services from three 4-year universities, and six vocational schools.

Metro Phoenix, Tucson Housing Analysis

About this Section

Because the Phoenix and Tucson metro areas represent more than 80 percent of the population – and more in terms of job opportunities – a review of housing trends is limited to these areas.

Phoenix Metro Area

The following analysis of 1999 housing prices for cities and towns in metropolitan Phoenix was extracted from an article by Jay Q. Butler, Ph.D., director of the Arizona Real Estate Center in the College of Business, Arizona State University. The article appeared in the April 2000 issue of *Arizona Business*, a monthly newsletter about the state's economy published by the Center for Business Research in the L. William Seidman Research Institute in the College of Business at Arizona State University. (For subscription information or to obtain copies of the issue containing the full text of this article, call the Center for Business Research at (480) 965-3961.)

Phoenix. The Valley's largest city continued to have the lowest median resale home price ($93,300). The median new-home price improved from $138,270 in 1998 to $141,240 in '99, much closer to the metropolitan new-home median price ($146,710).

Since Phoenix is large geographically, it contains a diversity of housing submarkets. For example. Phoenix accounted for 33 percent of the 1999 metropolitan resale market, with median sales prices ranging from $77,400 in the Maryvale district to $139,500 in the Chris-town district. With nearly 11 percent of the new sales activity, the range of median sales prices also reflected the market diversity, from $129,975 in the south Phoenix area to $180,000 in the Union Hills area. The city of Phoenix had a rate of appreciation slightly above the metropolitan level in 1999.

Ahwatukee Foothills. While most of this area lies within the city of Phoenix, it has been a primary area of new-home development over the last few years and merits its own consideration. However, as the area has built out, the resale sector has come to dominate the market with 2,135 sales versus 690 sales in the new-home market. The median sale price for resale homes increased from $164,000 to $169,000 from '98 to '99. Because most of the new homes are fairly comparable to the older/resale homes, the median new-home price is very comparable at $179,350.

Tempe. Because Tempe is landlocked, its new-home market represented only 9 percent of the homes sold in 1999 versus 30 percent in Mesa. Arizona State University and several other major local employers make Tempe a popular place to live. Hence, the Tempe housing market supports higher home prices than the metropolitan area (as a whole), with a median resale price of $132,000 and a new-home median price of $238,035. The median resale home price varies from $120,500 in north Tempe to $142,375 in south Tempe.

Tempe's popularity, combined with limited housing supply, resulted in a 1999 median rate of appreciation of 4.5 percent. Even within the city, the rate of appreciation varies from 5.7 percent in north Tempe to 4 percent in south Tempe.

Mesa. With 12 percent of the total metro Phoenix-area resale market and 14 percent of new homes, Mesa has become an important element of the local housing market. An important reason for Mesa's popularity is its relative affordability, with a median new-home sale price of $133,730 and $112,500 for resale homes. Because the city offers a wide range of housing at affordable prices, the median rate of appreciation improved from 3.4 percent in 1998 to 4 percent. Since Mesa is large, some variation in the rate of appreciation would be expected - 4.1 per - cent in north Mesa, 3.6 percent in south Mesa, and 4.1 percent in east Mesa.

The townhouse sector, popular with retirees and seasonal visitors, accounted for 21 percent of Mesa's total resale market and 14 percent of the metropolitan area's resale townhouse market. The burgeoning popularity is evident in rising median prices, which increased from $64,000 in 1997 to $72,000 in '99, while the metropolitan-area median moved from $77,500 to $81,900. The median rate of appreciation improved from 3.2 percent to 4.2 percent, with the highest rate of appreciation (4.3 percent) in east Mesa.

Chandler/Gilbert. The rapid expansion of the metropolitan area is especially evident in the growing communities of Chandler and Gilbert. New-home activity represented 41 percent (the same as in 1998) of all single-family homes sold in Chandler with a median sales price of $167,765 ($153,250 in 1998), while the median resale home price was $126,000 ($119,775 in 1998).

In 1999, nearly 64 percent of all single-family homes sold in Gilbert were new, but with some maturing of the market, the percentage has dropped to 49 percent with a median sales price of $146,410 ($137,000 in 1998). Prior to the current housing boom, most of the housing developments in Gilbert consisted of high-priced custom or semi-custom homes on large rural lots. Hence, the typical resale home in Gilbert is fairly large: 1,800 square feet with a median sales price of $142,000. As housing activity moves more to the mass market, there will be increasing conflict in both cities, especially Gilbert as residents try to retain their rural lifestyle.

Scottsdale, Paradise Valley and Carefree/Cave Creek. These communities contain the highest priced homes in the Valley. Not only does Paradise Valley have the highest median resale price at $635,000 but also the largest median size at 3,350 square feet. The Carefree/Cave Creek area had the second-largest homes, with a median size of 2,755 square feet and a median resale price of $368,000.

While these two areas have relatively small housing markets, Scottsdale is the third largest market in the Valley, with a wider mix of housing styles, types, and prices. The median resale home price was $225,000 (2,160 square feet), in comparison to $205,000 (2,200 square feet) in 1998. The new-home market increased to $270,260 (2,930 square feet) from $240,980 (2,660 square feet). Because higher-priced homes tend to experience greater rates of appreciation, the 5.4 percent rate of appreciation in Scottsdale would be expected.

As in Mesa, and for the same reasons, the townhouse market is important in Scottsdale, accounting for 32 percent of the city's resale market (a median sale price of $125,500) and 21 percent of the metropolitan resale townhouse market (a median resale price of $81,900). Scottsdale represented 43 percent of recorded new townhouse transactions with a median sales price of $155,480, in contrast to $136,070

for the metropolitan area. Since this housing sector is important in Scottsdale, the 4.9 percent rate of appreciation – significantly above the metropolitan rate of 3.2 percent – is not unexpected. The rate of appre - ciation was 4.8 percent in north Scottsdale and 5.4 percent in south Scottsdale.

Glendale/Peoria. The Valley's westside frequently is overlooked in discussions of growing housing areas, but it does have good markets that will become increasingly important as other areas run out of available land and lose affordability. In 1999, more than 55 percent of single-family homes sold in Peoria were new with a median sales price of $132,775, in contrast to $117,610 in 1998. In the resale home sector, the median sales price moved from $106,000 to $112,000. In Glendale, new homes represented 34 percent of the single-family market. The median resale home price was $110,005 in '99 ($103,875 in 1998), while the median new-home sales price was $140,965 ($139,070 in 1998).

Because both areas have median sales prices below those of the metropolitan area, their affordability indexes are among the highest in the Valley. The median rates of appreciation are well below the metropolitan levels because most of the homes are in the lower price ranges, which tend to have lower rates of appreciation. The higher level of new-home activity, which attracts new residents, probably accounted for the slightly higher appreciation rate in Peoria.

Sun City/Sun City West. Sun City is now more than 40 years old, and no new homes are being added to the community itself, but some new-home activity is occurring on its borders. The new-home sector in Sun City West plays a large role because it is considerably younger. Due to differences in the age and style of their respective housing stocks, the median sale prices for resale homes are significantly different between the two areas. The median sales price in Sun City ($95,000 vs. $93,500 in 1998) is one of the lowest in the metropolitan area, while Sun City West has one of the highest at $137,500 ($138,850 in 1998). The difference occurs even in the townhouse sector with Sun City at $74,250 and Sun City West at $87,750.

Because these communities have had a leading role in the active-adult market, strong rates of appreciation would be expected. Sun City West maintains a strong rate of appreciation of 3.3 percent, while Sun City is at 3.6 percent. Townhouses, with their low prices and maintenance requirements, play an important role in adult communities, so they tend to have higher rates of appreciation. Since the active-adult sector is expected to rapidly grow in the coming years, several new westside communities have been started. These communities, Palm Valley and Sun City Grand, could begin to impact sales activity and appreciation in the Sun City/Sun City West communities.

2000 and Beyond. Since the above information was written, preliminary year 2000 housing data for the Phoenix metro area were released. And from all indications, the Valley real estate market remained strong throughout the year, although there was a slight drop-off in sales from 1999.

Single-family housing resales slowed slightly in 2000, falling 2 percent from 1999's record pace of 56,365 resales. Final new-home sales were not available at the time of publication, but through November 2000, single-family building permits were down a mild 1 percent from 1999's levels to around 32,500. Overall, the Phoenix metro area remained one of the top 10 markets in the nation in home sales.

And while the state's home market is expected to slow additionally in 2001 and 2002, according to the *Western Blue Chip Forecast*, cuts in interest rates in early 2001 are expected to keep the local market fairly strong the next two years. Thirty-year fixed mortgage rates, which averaged around 8 percent in 2000, fell below 7 percent by early 2001.

The median price of an existing home in the Phoenix metro area in 2000 rose 7 percent, or about $9,000, from 1999 to $128,900. One reason for the significant gain in the resale price was that Valley home buyers (particularly, first-timers) decided to stay away from the more costly new-home market and instead purchase existing homes that were priced more affordably. Older neighborhoods in south and west Phoenix and Glendale showed particular strength.

Despite the positive outlook, growth management could affect the real estate market in the future. In 2000, citizens were faced with two approaches to growth management: Growing Smarter Plus, a more moderate form of growth management, was signed into law by the governor in April 2000; taking a tougher stand against growth, the Citizens' Growth Management Initiative, lost at the ballot box in November 2000. Both approaches were in response to

the demonstrative concerns about the future and nature of land development throughout Arizona. In addition, many communities have or are exploring the idea of raising fees associated with new construction. The potential for higher fees and growth limitations can greatly influence the future direction of new-home development, affecting prices for new and resale homes and the role of affordability in economic development. It is uncertain how the efforts to manage growth will affect real estate. But there is little doubt that changes are coming that will influence the nature, direction, and costs of developing new real estate projects.

Note: For information on the average cost of apartment rentals in the Phoenix area, see below.

Tucson Metro Area

The Tucson-area housing market was exceptionally strong in 1999 and through most of 2000, as sales for new and existing homes were at or near record levels. But whereas apartment vacany rates and rents had remained flat prior to 1999, the opposite held true the past two years, which was not good news for lower wage earners unable to afford house payments.

The median price for new and resale homes combined rose 4½ percent to $117,700 from 1998 to '99, and through the first half of 2000 the combined median price was hovering in the mid-$120,000 range. Generally, the median price for a new home in the Tucson metro area was 15 percent higher (about $20,000) than the price of an existing home. Data from mid-2000 showed a median price of a new home was $136,000, while an existing home was $117,000, according to the *Tucson Housing Market Letter*. Both showed only modest increases in prices from mid-1999 to mid-2000.

Not surprisingly, housing became somewhat less affordable in the Tucson MA (and nationally) during the past few years, according to a report by the National Association of Home Builders. While the Tucson MA moved up in rankings (from 126th to 110th) for housing affordability among 176 other metro areas in the association's Housing Opportunity Index (HOI) from the second quarter of 1999 to the third quarter of 2000, housing affordability decreased. The Housing Opportunity Index (HOI) measures the percentage of homes in a given area that households earning the median family income could afford to buy.[1]

A family earning the median family income in the Tucson MA during the third quarter of 2000 ($45,100) could afford to purchase only 61 percent of the houses on the market. In the second quarter of '99, Tucson's median family income ($43,600) could afford to purchase more than 66 percent of the homes on the market.

The Tucson MA compared less favorably to its metro area to the north, which also saw its housing affordablilty drop during the five-quarter period. The median family income in the Phoenix MA during the third quarter of 2000 ($53,100) could afford 65 percent of the houses on the market, down from 73.5 percent of the homes 15 months earlier. (The national affordability rate was 58 percent in 3rd Quarter 2000, down from 67 percent in 2nd Quarter 1999.) But the Tucson and Phoenix metro areas looked great compared to the Flagstaff metro area, where the median family income of $45,500 would have only bought 41.8 percent of houses sold in the third quarter of 2000, which was down from 48 percent in the second quarter of '99.

With housing affordability declining, it follows that apartment vacancy rates would fall and rents increase faster than in the recent past. And that was the case in both the Tucson and Phoenix metro areas. According to *Phoenix Apartment Report*, metro Phoenix apartment vacancy rates fell 1.7 percentage points to 4.5 percent in the fourth quarter of 2000, compared to the fourth quarter of 1999. The decline in vacancy rates occurred despite an over-the-year increase of nearly 13,000 units. The overall average rent paid in the Phoenix MA was $689 per month, a 3 percent increase from a year earlier. However, the increase was mild compared to the mid-1990s, when the average rental rate rose from $453 in 1993 to $619 in '98, a jump of more than 7 percent annually. According to RealData Inc., a Phoenix. real estate analysis company, an unfurnished one-bedroom/one-bath apartment in the Phoenix metro area rented for $582 in the fourth quarter of 2000; a two-bedroom/two-bath cost $754; and a three-bedroom/two-bath rented for $1,028.

With much higher vacancy rates in recent years, the Tucson MA had experienced much milder rent increases. But vacancy rates began to fall in 1999, as mortgage rates and prices of single-family homes increased, making a home less affordable. The Tucson-area apartment vacancy rate was 10.3 percent, seasonally adjusted, in the second quarter of 1998, according to a land-use study by the University of Arizona's College of Business and Public Administration. But the vacancy rate fell to 7.9 percent by the fourth quarter of 2000, according to RealData.

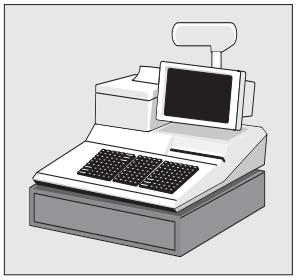
The average rent for an unfurnished apartment in the Tucson metro area in the fourth quarter of 2000

was as follows: one-bedroom/one-bath – $456; two-bedroom/two-bath – $666; and three-bed - room/three-bath – $799. The overall average rent in 2000 was $527, up 2.7 percent from $513 in 1999.

The average rents were based on apartment complexes with 50 or more units in Phoenix and 40 or more units in Tucson, and does not include new projects going though "lease-up phase," nor subsidized or student housing projects.

Cost-of-Living Comparison

A quarterly cost-of-living index produced by the American Chamber of Commerce Research Association (ACCRA) is, to Research Administration's knowledge, the only cost-of-living index which is comparable from city to city.



The ACCRA index uses a mid-point of 100.0 to substitute for the average costs of all cities. The amount by which any city's index is above or below a value of 100 is that city's percentage difference from the average. For example, a city with a composite index of 132.5 is 32.5 percent more costly than the "average city" studied; while a city with an index of 97 is 3 percent less costly than the average city. This differencing rule applies to the component indices as well (housing or groceries, for example).

In Table 5 on the following page, the cost of living in six Arizona cities or metro areas is compared with selected cities in the West and around the country for the third quarter of 2000. Readers should be cautioned, however, that this is only a general measure of costs, and data shown was for only one quarter of the year. Finally, it should be noted that these figures are not related to city data gathered by the U.S. Department of Labor for its monthly Consumer Price Index.

Note:

1 Median family income is the median income of households with two or more persons.

Table 5

Cost of Living Data for Selected Arizona, Western, and Other U.S. Cities, 3rd Qtr., 2000

	Composite Index	Grocery Items	Housing	Utilities	Trans-portation	Health Care	Misc. Goods/ Services
Arizona Cities							
Phoenix Metro Area ...	99.0	102.8	100.9	94.9	102.8	117.8	92.4
Flagstaff.....	102.5	102.1	113.5	96.3	107.8	116.8	91.1
Lake Havasu City	97.7	108.3	98.5	99.5	92.6	96.1	93.2
Prescott/Prescott Valley	113.9	110.1	137.3	96.5	108.9	115.0	101.4
Tucson Metro Area.....	98.8	108.1	93.2	109.7	103.6	116.8	92.1
Sierra Vista	97.4	104.7	90.8	120.5	105.0	102.2	90.9
Yuma	96.6	98.0	87.8	140.0	105.9	98.5	89.9
Western U.S. Cities							
Sacramento, CA	117.7	119.3	130.9	111.0	115.9	137.8	104.8
Los Angeles, CA	147.7	111.4	241.5	114.7	109.1	120.8	109.4
San Diego, CA	120.8	119.9	142.6	122.0	117.5	123.6	103.0
Colorado Springs, CO	97.3	101.2	103.3	74.4	99.1	115.7	92.4
Denver, CO.....	110.0	113.1	123.4	82.9	107.0	128.5	101.7
Albuquerque, NM.....	99.9	109.1	99.7	91.7	98.1	100.8	97.9
Las Cruces, NM	93.1	103.1	89.2	90.1	90.5	94.7	92.7
Santa Fe, NM.....	113.7	101.1	146.8	85.6	106.5	110.3	101.3
Dallas, TX.....	99.9	97.0	98.8	95.0	105.6	101.4	101.4
El Paso, TX	92.3	103.1	85.3	90.6	104.3	94.4	89.4
Houston, TX.....	94.3	93.5	84.0	95.9	108.8	109.1	96.4
San Antonio, TX.....	89.9	92.5	83.0	71.9	91.7	94.3	97.5
Boise, ID	99.9	99.3	98.5	82.6	97.3	112.9	104.3
Portland, OR	107.0	102.7	115.3	84.8	109.1	122.1	104.6
Las Vegas, NV.....	105.6	113.7	102.0	88.2	114.2	124.7	103.5
Salt Lake City, UT.....	103.1	114.0	102.9	76.0	101.3	98.7	105.9
Spokane, WA.....	102.7	106.2	106.8	67.7	98.1	117.0	105.2
Tacoma, WA.....	103.3	113.4	106.8	70.4	103.2	116.2	101.4
Cheyenne, WY	96.6	109.2	87.6	92.9	101.5	101.8	96.7
Other U.S. Cities							
Washington, DC.....	114.7	112.6	129.0	97.1	109.3	114.7	109.4
Tampa-St. Petersburg, FL	99.4	104.1	95.4	102.9	99.8	98.6	99.6
Atlanta, GA.....	102.0	102.2	103.8	90.4	108.3	104.0	101.0
Boston, MA	132.5	116.6	171.2	134.0	111.6	130.0	113.8
New York (Manhattan), NY	241.0	143.9	485.3	199.3	121.2	176.3	137.0

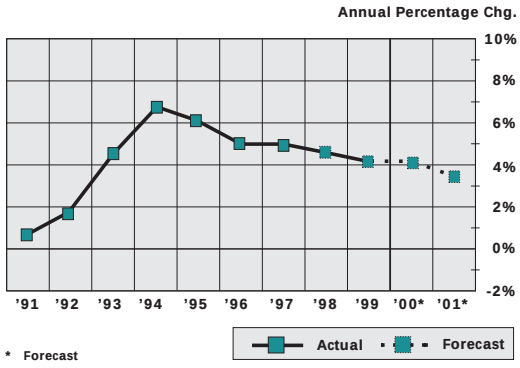
Source: American Chamber of Commerce Research Association, provided through Phoenix Chamber of Commerce, February 2001

Industry Employment

Arizona's Department of Economic Security, Research Administration (RA) expects the state's economy to grow by 166,400 jobs over the 2000-2001 period. RA forecasts a rate of growth of 3.9 percent for 2000 and 3.5 percent for 2001. And while just about everyone agrees the economy is showing some signs of a slowing, the signs are modest given the inertia supporting the current expansion.

Figure 1

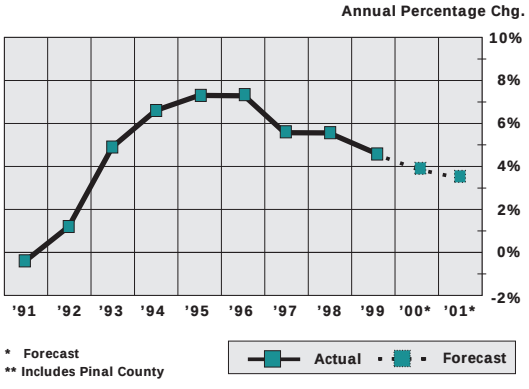
Arizona Nonfarm Payroll Employment Growth Rates, Actual (1991-1999) and Projected (2000-2001)



Source: Arizona Dept. of Economic Security, Research Administration, August 2000

Figure 2

Phoenix-Mesa Metro Area Nonfarm Payroll Employment Growth Rates, (1991-1999) and Projected (2000-2001)



Source: Arizona Dept. of Economic Security, Research Administration, August 2000

RA's forecast shows Arizona's construction jobs growing throughout the next two years, but slowing from the 7.5 percent in 1999 to 2.4 percent in 2000 and to 1.5 percent in 2001. Much of the slowdown is expected in the general construction and heavy construction sectors, while job increases are expected in special trades.

Arizona's manufacturing industry is forecast to grow by 4,000 jobs in 2000 and by nearly 3,500 in 2001. Respective growth rates range from near 2 percent in 2000 to roughly 1.6 percent in 2001. Meanwhile, a national forecasting group expects U.S. manufacturing jobs will experience slight declines in each of those years.

It's also not surprising to point out that Arizona's services industry is expected to continue growing. After growing more than 8 percent in 1999, projected growth rates for 2000 and 2001 are, respectively, a slower 6.6 percent and 5.2 percent. While slowing, the industry is still expected to add more than 82,000 jobs during the two-year period.

Arizona's trade industry is expected to grow at rates in the low 3 percent range. Wholesale trade is expected to experience a decline in employment. Retail trade sectors are expected to show mixed results, with department and apparel stores posting modest increases and most other trade sectors showing a slowing trend.

At this point, it's important to point out that RA is convinced that the earlier interest rate hikes brought about by the Federal Reserve are bearing downward pressure on consumer and business sectors. Debt is now costing a great deal more than last year.

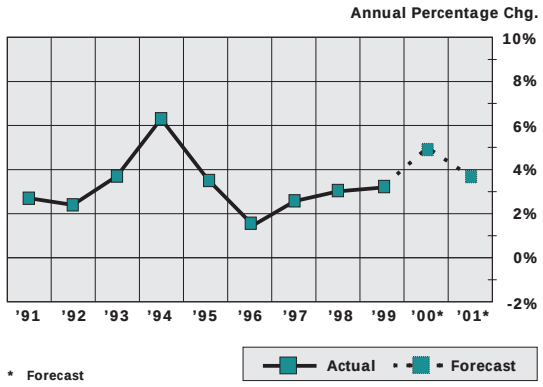
Arizona's finance, insurance, and real estate (FIRE) group has experienced a very strong near decade of growth. RA's forecast suggests the growth period isn't yet over and is expected to continue. More than 10,000 jobs are expected to be created over the two-year forecast period, as growth rates basically hover between the 3 percent and 4 percent range. This industry is, nevertheless, expected to show mixed results, as mergers and consolidations result in layoffs for some, while others seek market expansion.

The transportation, communications, and public utilities (TCPU) group is one to watch, particularly in light of continuing deregulation. RA expects a net increase of 11,000 jobs over the two-year period, with growth rates in the 5 percent range.

Although perhaps not a surprise, given weakness in copper prices, mining is forecast to be the only major industry losing jobs. RA expects industry employ-

Figure 3

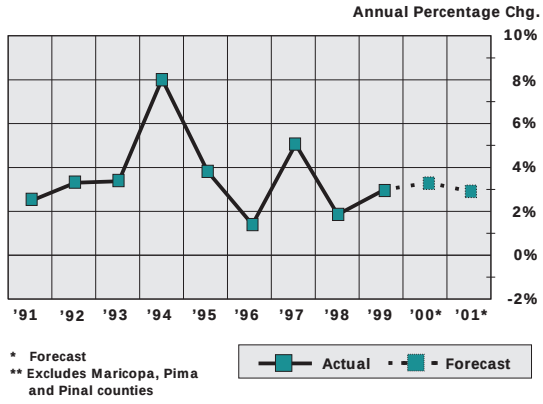
Tucson Metropolitan Area Nonfarm Payroll Employment Growth Rates, Actual (1991-1999) and Projected (2000-2001)



Source: Arizona Dept. of Economic Security, Research Administration, August 2000

Figure 4

Nonmetropolitan Counties' Nonfarm Payroll Employment Growth Rates, Actual (1991-1999) and Projected (2000-2001)



Source: Arizona Dept. of Economic Security, Research Administration, August 2000

ment levels will shrink further over the two-year period, from 11,500 in 1999 to 9,800 in 2001.

RA's forecast shows government employment growing 4.9 percent over the two-year period, adding nearly 17,000 jobs. Not surprisingly, the education sector is expected to show the greatest increases, because of strong population gains.

Industry Wages

Statewide

Between 1994 and '99, overall wage growth in Arizona outpaced the nation as a whole by more than two percentage points – 25.7 percent vs. 23.6 per - cent. Overall in 1999, the average wage in Arizona was $30,523, 4.1 percent (or $1,200) higher than in '98, compared to a national average of $33,313. The state ranked 24th among all states and Washington D.C. in average annual pay in '99, improving five places since '94.

Recent better-than-average wage gains, however, only partially offset a sluggish period of wage growth during the latter part of the 1980s and the early '90s. Due to weak finance and construction sectors, in only one year between 1985 and '93 did Arizona have wage gains larger than the rest of the country. During that time, the nation's average annual wage grew about 25 percent faster than in Arizona, widening a deficit of about $1,000 in the annual average wage to nearly a $3,000 shortfall. And as would be expected, Arizona's ranking among all states and Washington D.C. fell from about 20th to nearly 30th during that period.

What turned the state around the past few years? A number of factors contributed, not the least of which was state legislation in the early '90s that provided economic incentives to a variety of manufacturers (e.g., semiconductors, defense-related) to relocate or expand their operations in the state. The result was that employment and wages surged in manufacturing, helping lift the state's overall wage growth. Additionally, the finance and construction sectors that had been decimated by problems in the savings and loan industry in the late 1980s and early '90s (all but one of Arizona's S&Ls went belly-up) began to turn around when the oversupply of commercial, industrial, and residential real estate (particularly in the Phoenix metro area) was sold off. And a national economy that took off helped spur growth in a wide range of sectors – from high-tech manufacturing, to business and health services, to retail and wholesale trade.

Industry Trends

During the past several years, several of Arizona's major industry groups had exceptional wage growth; several had solid wage gains; and one major industry (mining) had up and down growth, but more importantly, declines in employment and in its importance to the state.

Table 1

Arizona and U.S. Average Annual Wage, 1999(1)

	Annual Pay		Pct.
	1999(2)	1998	Chg.(3)
United States			
Private Industry(4)	**$33,220**	**$31,762**	**4.6%**
Mining	54,653	52,066	5.0
Construction	34,798	33,386	4.2
Manufacturing	41,918	40,092	4.6
TCPU(5)	41,729	39,345	6.1
Wholesale Trade	44,144	41,831	5.5
Retail Trade	17,592	16,810	4.7
FIRE(6)	50,865	48,641	4.6
Services	31,491	30,053	4.8
Government	**$33,830**	**$32,953**	**2.7%**
Arizona			
Private Industry(4)	**$30,133**	**$28,856**	**4.4%**
Mining	51,452	45,851	12.2
Construction	30,859	29,378	5.0
Manufacturing	44,198	42,770	3.3
TCPU(5)	37,831	35,805	5.7
Wholesale Trade	42,664	39,899	6.9
Retail Trade	18,418	17,637	4.4
FIRE(6)	38,597	37,449	3.1
Services	28,135	26,725	5.3
Government	**$32,871**	**$32,099**	**2.4%**

Notes:

1 Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs

2 Data are preliminary

3 Percent changes were computed from unrounded average annual pay data and may differ from those computed using data rounded to the nearest dollar

4 Includes data for industries in addition to those shown separately

5 Transportation, Communications, and Public Utilities

6 Finance, Insurance, and Real Estate

Source: U S. Dept. of Labor, Bureau of Labor Statistics, November 2000

By far, the stellar performers have been manufacturing, led by the high-tech sectors, and wholesale trade. Between 1994 and '99, manufacturing wages increased 28.6 percent, or slightly under 6 percent a year. The average wage in manufacturing in '99 was $44,198, ranking Arizona 10th among all states and Washington D.C. The force behind manufacturing's strong growth has been the high-tech sectors, such as semiconductors. Between 1994 and '99, the average wage in the semiconductor sector grew by 28.6 percent to $70,700 (see Figure 5). That means that when all 33,500 workers – including clerical, assembly, and even janitors – in the state's semiconductor sector are included, the average wage per worker was $70,700.

Even stronger (hard to believe), in percentage terms, was the growth of wages in Arizona's wholesale trade sector. Between '94 and '99, the average wage in wholesale trade grew a staggering 36 percent, or 7.2 percent a year, to slightly over $42,600 a year. In that time, Arizona's average wholesale trade wage erased more than half of a $4,100 deficit to the 1994 U.S. average wholesale trade wage. Behind the strong growth in wholesale trade wages was the growth of warehouse operations in the Phoenix metro area. National companies such as Wal-Mart, Fry's (a division of Kroger), and Avnet have developed significant distribution centers in Arizona for transportation of goods throughout the state, the West, and Mexico. Available industrial space and lower cost of operation than surrounding states (such as California) were two of the prime reasons for growth of wholesale trade.

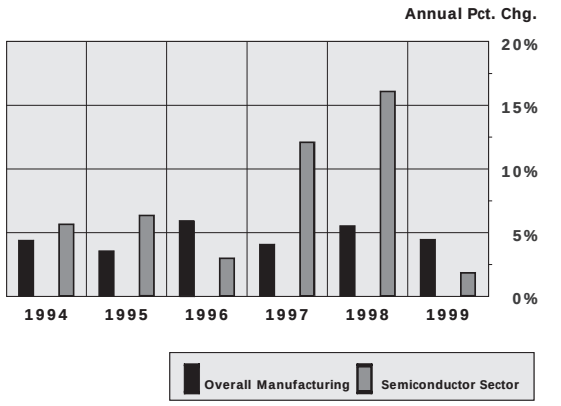
Although not flying quite as high, but certainly no slouch in terms of wage growth, were Arizona's retail trade; construction; and finance, insurance, and real estate (FIRE) industries.

Arizona's retail trade sector, which has been hard-pressed to find workers for an explosion of national retail stores and shopping centers, had consistently faster wage growth than the nation between 1994 and '99. Arizona retail trade wages grew 25.5 percent, compared to U.S. growth of 22.3 percent. The average retail trade worker in Arizona earned $900 more than the average worker nationally in '99, with the state's average wage ($18,414) ranking 11th among all states and D.C. (It should be noted that the average wage for retail trade is significantly lower than other industries because a large percentage of people in this industry work part-time.)

With one of the strongest real estate markets across the board – single-family, commercial, and industrial – wages in Arizona's construction and FIRE industries have posted solid gains the past several years. Although significantly below the national average wage in '99 ($30,859 vs. $34,798), construction wages grew faster than nationally in recent years. Between 1994 and '99, construction wages

Figure 5

Annual Percentage Change in Arizona Overall Manufacturing and Semiconductor Sector Wages, 1994-'99



Source: Arizona Dept. of Economic Security, Research Administration, November 2000

grew about 10 percent faster (25.1 percent vs. 22.9 percent) in Arizona than the nation as a whole. And for the entire decade of the '90s, construction wages grew 17 percent faster in Arizona than the nation. Nearly a 90 percent increase in construction employment (82,600 in '90 vs. 154,500 in '99), along with a shortage of workers, contributed to the state's improvement. But although the state has made up some ground in the past decade, Arizona's right-to-work status (i.e., low unionization rate), will likely keep the state's average construction wage significantly below the national average for the foreseeable future.

With the exception of an extremely weak commercial banking sector in '97 – due to consolidations and layoffs of higher-paid workers – the state's FIRE industry posted strong wage growth in recent years. Between 1994 and '99, FIRE wages grew 28.7 percent (second highest among the state's major industry groups), or about 5½ percent a year. Excluding commercial banks, which employ about 20 percent of FIRE's more than 100,000 workers, wage growth would have been significantly higher during that five-year period. But it's unlikely it would have made a difference in comparison to the national FIRE wage, which jumped an amazing 41.1 percent (highest of any major industry group). At the end of '99, Arizona's FIRE wage trailed the national average by more than $12,000 – $38,597 vs. $50,865.

One industry that has fallen on hard times has been mining, particularly copper mining, which has consistently lost employment over the last 15 years due to technological improvements and competition from lower-paid foreign markets (see "Industry Employment," at beginning of section). With the exception of strong wage gains in '96 and '99, wage growth was flat or negative between 1994 and '99. And the prognosis is not good for the copper mining industry, which has seen several major operations close in the past few years.

Metro-Area Pay

Wages in the state's four metropolitan areas (MAs) had strong spikes – up and down – between 1994 and '99. But it was Arizona's two largest metro regions that proved to have the most consistent and strongest overall growth, which also topped the national average for metro areas during that five-year period.

The Tucson and Phoenix MAs grew at nearly an identical rate, 26.5 and 26 percent, respectively, between '94 and '99, outdistancing the national average (23.9 percent) by a healthy two percentage points. In that time, the state's two largest MAs also moved up sharply in the rankings among 316 metro areas in the nation (including Puerto Rico) tracked by the U.S. Department of Labor's Bureau of Labor Statistics.

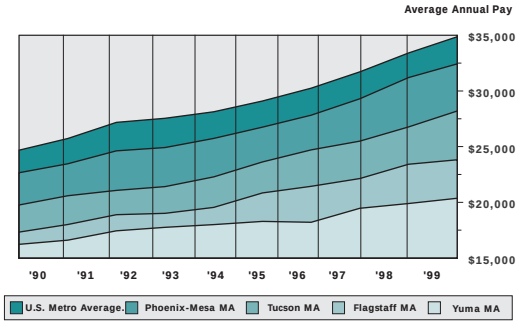
Strong high-tech manufacturing job growth accounted for much of the gains in the two largest metro areas, with the Phoenix MA's concentrated in semiconductor-related industries and the Tucson MA's in aerospace- and defense-related sectors. The Flagstaff MA had moderately strong wage gains between '94 and '99, ending the period with nearly 22 percent growth, while the agriculture-dominated Yuma MA had weak growth (13.2 percent) during the period, except for 1997. A rise in the minimum wage likely accounted for more than half of the Yuma MA's gains for the five-year period in that single year, when wages spiked 6.9 percent.

The wholesale and retail trade and FIRE industries also contributed to the Phoenix MA's wage strength (see "Statewide), while a rebound in government wages also gave a boost to the Tucson and Flagstaff MA's overall gains.

Looking at 1999 numbers, despite wage growth slightly below the national metro average of 4.4 percent, the Phoenix-Mesa MA moved up in the national rankings seven spots to 57th, its highest ranking in more than a decade. In the early 1990s, the metro area had fallen to as low as 104th place due to faster growth than the nation in lower-paying service-sec-

Figure 6

Average Annual Wage for Overall U.S. and Arizona Metro Areas, 1990-'99[a, b, c]



Notes:

a) Phoenix Metro Area included Pinal County starting in 1990

b) Yuma County became a metro area in 1990

c) Flagstaff MA includes Coconino County in Arizona and Kane County in Utah

Source: Arizona Dept. of Economic Security, Research Administration, November 2000

tor jobs and the fallout from the S&L crisis. The average wage for the Phoenix-Mesa MA in '99 was $32,430, about 7 percent (nearly $2,500) below the national metro average of $34,868. In '94, the MA was about 10 percent below the U.S. average.

The Tucson MA (Pima County) has also improved its standing among metro areas in recent years, including '99, when its 5.3 percent wage growth brought its annual pay to $28,194. The Tucson MA ranked 151st in '99, up 27 places from '98 and almost 100 spots better than in 1992, when the MA was 244th among metro areas. And with the continued expected growth of the aerospace and defense industries – particularly in light of President Bush's emphasis on a missile-defense system – the outlook for Tucson's wage growth appears solid.

Although the Flagstaff metro area (which includes Coconino, Arizona, and Kane County, Utah) has shown improved wage growth during the past five years, the MA still ranks 282nd among all metro areas. A miserly 1.7 percent growth rate in '99 didn't help the MA's cause, pushing the metro area's ranking down two places. And with an economy still dominated by service industries, it isn't likely that annual wage growth will be able to exceed the 4-plus percent of the '94-'99 period. However, Flagstaff is in the process of studying ways to increase economic development, particularly in industries such as wholesale trade and manufacturing, which could help raise its average annual pay. Flagstaff's locations along a major interstate highway (I-40) and railway line could act as an incentive to lure higher-paying industries. Also, a rumored removal of Kane County from the metro area – its more than 200 miles and a Grand Canyon away from Flagstaff – after 2000 census data are released would boost the area's wage. Excluding Kane County would have boosted the MA's wage $400 in '97 alone.

With nearly 30 percent of the Yuma MA's workforce employed in agriculture, it isn't likely that annual wage growth will exceed the 3 percent average of the '94-'99 period. Without two minimum-wage increases in '96-'97, wage growth would have been less than 2 percent annually. In '99, the average wage in the Yuma MA (Yuma County) was $20,363, ranking the metro area ahead of only 10 other MAs (including three in Puerto Rico). However, "hope springs eternal," and continued economic activity along the Mexican border (about 50 miles to the south) due to NAFTA may lead to higher wages as the area broadens its industry base.

Occupational Demand, Wages

Determining Demand

The current occupational profile of workers employed in Arizona has been impacted by strong expansion over the last two decades in professional, technical, and service occupations, combined with slower-than-average growth in production and maintenance occupations.

Consistent with this trend is the observation that occupations requiring more education are generally growing faster than those with lower educational requirements. However, when the number of job openings is considered, rather than the rate of employment growth, occupations requiring less education continue to dominate.

Our economic system creates a great number of jobs and, even in the worst economic times, creates employment opportunities. The success of a job search, however, depends on the interplay of many forces, not the least of which is the balance between the supply of job seekers and the demand for workers. On the supply side, the labor pool is constantly changing as prospective employees graduate from training, leave other occupations and geographic areas, and enter the labor force for the first time. Job openings, on the other hand, occur for two reasons: industry growth and replacement needs.

Industry growth is the most obvious source of job openings. A new manufacturing plant opens in Tuc-

son and hires 300 new people. A grocery store in Yuma opens a second store and hires additional people. Employment growth occurs when new plants, businesses, or agencies are established and existing firms expand.

Job openings resulting from replacement needs occur primarily as a result of turnover (i.e., workers change jobs, leaving the position to be filled by someone else). People seek higher salaries, more interesting work, a better place to live, or merely change. Occupations that are characterized by high turnover rates generally require less education and training (i.e., the greater the investment in securing and holding a job, the less likely a person will leave that job). Replacement needs are also created when someone dies, retires, or otherwise leaves the workforce. In addition, employers continually look for better employees and contribute to the cycle of turnover, which creates vast numbers of job openings.

When reviewing data to determine prospects for employment, remember that occupational demand is largely determined by economic activity. For example, a bright outlook for the construction industry will strengthen the demand for occupations that are concentrated in construction. Also, consider that occupations with high employment are likely to have frequent job openings due to growth and turnover. For this reason, estimates of occupational employment are often used to predict occupational demand.

Arizona Trends

In coming years, occupations will continue to evolve as they adjust to changing technology, consumer demands, economics, political and environmental issues, and other forces. Professional and technical workers, for example, will continue to increase their share of the workforce, boosted by demand in the health services industry, computer technologies, and legal services. Few job seekers will find more opportunities than those aspiring to be registered nurses as our population ages and employment expands in skilled-nursing and home health-care facilities. And the demand for teachers will be substantial in response to an expanding school-age population and the need to replace teachers who change occupations or leave the labor force. In manufacturing, too, professional and technical workers will be in demand, as research and development, in particular, boosts demand for engineers, scientists, and technicians. Professional and technical workers are also heavily represented in such rapidly growing business services as engineering, legal, and management consulting. Paralegals, in particular, are expected to increase their numbers significantly as law firms and other firms restructure tasks.

Clerical occupations, which are common to all industries and account for one of every five workers in Arizona, will account for many job opportunities in the coming years. Although the number of clerical workers is growing more slowly than the average for all occupations, strong demand results from the need to replace workers who leave their jobs. And despite lower demand for many clerical workers (primarily the result of automation), job seekers with basic computer skills and familiarity with office machines will be especially attractive to employers. In particular, secretaries with strong skills are highly valued, as women continue to move out of clerical occupations and into positions traditionally held by men. In schools, teacher aides will find more opportunities as administrations continue to target students with special needs and augment professional staff.

Service occupations will also generate many opportunities, both as a result of expansion in industries such as food services, health care, and business services, as well as the need to replace workers who leave their current positions. Food-service occupations will provide the largest share of opportunities as a growing number of Arizonans choose to not cook for themselves and, in a vibrant economy, are more inclined to buy lunches and entertain clients. In the expanding health services industry, nursing aides and orderlies will be in demand in response to an emphasis on rehabilitation and the needs of an aging population. Also increasing the demand for nursing aides is modern technology that, while saving lives, increases the need for extended care. Homemaker and home-health aides, as well as psychiatric aides, will also find many job prospects.

Although marketing and sales occupations account for only 12 percent of Arizona's employment, more people are employed as retail salespersons than any other occupation. Retail trade is, by nature, labor intensive and greatly dependent upon retail salespersons and others to deliver goods and incidental services to customers. Although recent developments have lessened the reliance upon workers for certain tasks, such as the use of computerized gasoline pumps to serve customers, many services in the trade industry will be difficult to automate. Personal service will continue to be a primary goal in the marketing strategy of many retailers. Because turnover is high in many sales occupations, replacement needs will create a significant number of job openings.

Despite actual numerical growth, the number of operators, fabricators, and laborers, will continue to

Table 2

Arizona's Largest Occupations and Respective Hourly Wage, 1998[1]

Occupation	Hourly Wage[1]	Total Emp.	Pct. of Total[2]
Cashiers	$7.82	52,547	2.41%
Retail Salespersons	$9.99	52,102	2.39%
Office Clerks, General	$9.49	44,989	2.06%
General managers and Top Executives	$31.19	41,811	1.91%
Secretaries, exc. Legal and Medical	$11.30	37,098	1.70%
Waiters, Waitresses	$5.78	36,080	1.65%
Marketing and Sales Worker Supervisors	$17.11	34,954	1.60%
Janitors and Cleaners	$7.60	30,837	1.41%
Registered Nurses	$19.84	28,392	1.30%
Office, Admin. Support Supervisors, Managers	$15.86	27,810	1.27%
Bookkeeping, Accounting, and Auditing Clerks	$11.23	27,747	1.27%
Food Preparation and Service Workers, Fast Food	$6.21	27,189	1.24%
Receptionists, Information Clerks	$8.81	26,507	1.21%
Laborers, Landscaping and Groundskeeping	$7.75	25,444	1.16%
Teachers, Elementary[3]	$33,790	24,347	1.11%

Occupation	Hourly Wage[1]	Total Employment	Pct. of Total[2]
Carpenters	$13.24	24,272	1.11%
All Other Helpers, Laborers, and Material Movers, Hand	$8.57	22,612	1.04%
Truck Drivers, Heavy	$13.77	22,035	1.01%
Telemarketers, Door-to-Door Sales Workers	$8.93	21,879	1.00%
Truck Drivers, Light	$10.39	21,586	0.99%
Maintenance Repairers, General Utility	$11.72	20,117	0.92%
Food Preparation Workers	$6.48	19,364	0.89%
All Other Clerical, Admin. Support Workers	$11.35	18,660	0.85%
Stock Clerks, Sales Floor	$7.97	18,261	0.84%
All Other Professional, Paraprofessional, and Technical Workers	$18.46	18,237	0.83%
All Other Managers and Administrators	$26.69	18,178	0.83%
Adjustment Clerks	$9.63	17,533	0.80%
Teachers, Secondary[3]	$36,170	16,517	0.76%
Other Sales Reps, Exc. Retail	$17.26	16,505	0.76%
Guards	$8.10	16,234	0.74%

Notes:

1 Wage data taken from *1998 Employer Wage Survey*, produced by the U.S. Department of Labor, Occupational Employment Statistics Division, in cooperation with Arizona Dept. of Economic Security, Research Administration

2 Percentage of all Arizona occupational employment

3 Teacher pay is based on annual, not hourly wages

Source: Arizona Dept. of Economic Security, Research Administration, June 2000

account for a smaller share of Arizona's employment. Particularly vulnerable to pressures of mechanization is employment of laborers, freight and stock movers, and other unskilled workers. Automation, coupled with the relatively large labor force in these occupations will make job-hunting increasingly competitive. Truck drivers, on the other hand, will likely continue to benefit from increased trade between Mexico and United States.

The precision-production and craft workers category employed one of every 10 Arizonans in 1996. Led by general maintenance repairers and construction trades workers, such as carpenters and electricians, employment in this category is heavily depend-

Table 3

Occupations with Best Employment Potential[1]

Occupation	Hourly Wage[2]	Total Emp.	Annual Growth Rate
Engineering, Nat. Science, and Computer and Info. Systems Mgrs.	$34.01	7,902	5.3%
General Managers and Top Executives	$31.19	41,811	4.0%
Loan Counselors, Officers	$23.70	6,114	8.7%
Accountants, Auditors	$19.98	14,778	4.3%
Human Resources, Training, Labor Relations Spec.	$15.77	10,523	4.7%
All Other Mgmt-Support Workers	$19.15	11,691	4.3%
Computer Engineers	$30.75	5,178	11.8%
Systems Analysts	$24.70	9,281	11.5%
Computer-Support Spec.	$18.62	8,092	12.1%
Computer Programmers	$26.17	10,477	6.2%
All Other Professional, Paraprof., Tech. Workers	$18.46	18,237	3.7%
Sales Agents, Selected Business Services	$15.50	7,216	6.0%
Counter, Rental Clerks	$7.86	11,448	4.9%
Cashiers	$7.82	52,547	3.7%
Telemarketers, Door-to-Door Sales Workers	$8.93	21,879	8.8%
Office, Admin. Support Supervisors, Managers	$15.86	27,810	4.6%
Adjustment Clerks	$9.63	17,533	8.2%
Bill, Account Collectors	$10.90	7,662	9.5%
Laborers, Landscaping and Groundskeeping	$7.75	25,444	4.8%
Farm Workers, Food and Fiber Crops	$6.07	10,918	6.1%
Maintenance Repairers, General Utility	$11.72	20,117	3.7%
Electricians	$14.59	13,209	3.75
All Other Assemblers and Fabricators	$8.76	15,526	3.7%
Mechanic, Repairer Helpers	$10.04	10,059	6.4%
Hand Packers, Packagers	$6.78	15,994	4.9%
All Other Helpers, Laborers, Material Movers, Hand	$8.57	22,612	3.7%

Notes:

1 Occupations listed have the highest measures of a composite index based on total employment, estimated new jobs , and the unemployment rate of workers in those occupations who are covered by unemployment insurance

2 Wage data taken from *1998 Employer Wage Survey*, by the U.S. Department of Labor, Occupational Employment Statistics Division, in cooperation with Arizona Dept. of Economic, Research Administration

Source: Arizona Dept. of Economic Security, Research Administration, June 2000

ent on cyclical construction activity. In this, the latest cycle, employment in construction has ranged from a low of 73,000 in 1992 to more than 154,000 in 1998.

Executives and other managerial workers, who numbered 155,000 in 1996, are found in virtually all businesses and it is therefore not surprising that the greatest numbers are found in industries that are comprised of small firms. For example, general managers and top executives are most numerous in business services, special trades construction, and wholesale trade – industries typified by small com - panies. Also employing many general managers are state and local governments. Industries in which general managers account for the largest share of employment, however, include "holding and other in-

vestment offices;" "offices of insurance agents and brokers," and "commodity brokers and dealers." In the coming years, the number of executive and managerial workers is expected to increase at a rate more moderate than was demonstrated in the '80s. Workplace restructuring will continue to redefine worker roles and few occupations will be impacted as much as middle managers.

About Occupational Tables

The tables on pages 27 and 28 report average hourly wage data as determined by the 1998 Occupational Employment Statistics (OES) survey. The OES survey is an annual mail survey measuring occupational employment and occupational wage rates for wage and salary workers in nonfarm establishments by industry. In Arizona, the survey samples approximately 5,500 establishments per year, taking three years to fully sample the universe of 110,000 establishments. The U.S. Department of Labor's Bureau of Labor Statistics (BLS) and Employment and Training Administration (ETA) provide the funding for the survey. BLS provides the procedures and technical support, while the State Employment Security Agencies (SESAs) collect the data. The SESAs produce occupational estimates by detailed industries for local areas and the states. BLS produces similar estimates for the nation, as well as employment and wage estimates for 750 occupations across all industries for the nation and each of the 50 states plus the District of Columbia.

More information on the survey and a complete listing of Arizona occupational wages is published annually by DES, Research Administration, in its Employer Wage Survey. For a free copy of the publication, contact Research Administration at the address or phone number listed on page *i*.

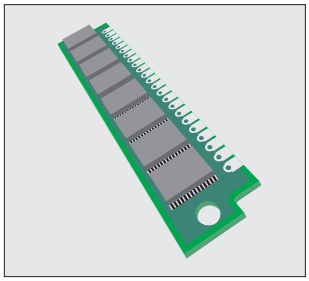
Job Developments

Phoenix Metro Area

Manufacturing

A developer of **airbags for commercial airplanes** expects to **hire 250 to 300 employees** over the next five years for a manufacturing operation **east of Williams Gateway Airport in Mesa**. Based in Phoenix, **AMSAFE Inc.** will initially build a 30,000-square-foot manufacturing building and a 10,000-square-foot testing facility on 36 acres at Williams Field and Mountain roads to house its **Inflatable Restraints Division**.

Work is "taking off," literally, at Gilbert-based **Spectrum Astro Inc.** The satellite manufacturer **expects to add 500 to 700 engineers and technicians** to its current workforce of 300 **over the next five years** if it secures a multi-billion dollar contract to build a U.S. missile defense system. Spectrum Astro is in good position to win the contract, which will be awarded in 2002, since it has a three-year, $275 million contract to prepare a study for building the system. The company's 232,000-square-foot campus at Elliot and McQueen roads has sufficient space to build 20 satellites at one time.



The city of Chandler, already home to chipmakers Intel, Motorola, and Microchip, will soon have another chip manufacturer. **AmaTech USA Inc**., a subsidiary of AmaTech AG of Germany, will **open a 12,000-square- foot operation** at the Frye Road Industrial Park to build memory chips for credit, debit, and smart cards. The $5 million facility is expected to **employ about 40 workers** by the **end of 2000** with an average salary of $37,000.

A Tacoma, Wash.-based maker of window panes could "open up" **employment opportunities for several hundred people** in Tempe over the **next several years**. **Milgard Manufacturing, Inc.**, a 40-year-old private company, opened a sales and distribution office in May 2000 and a manufacturing operation in late 2000.

Although it's still in its infancy, Micro Photonix Integration Corp. in north Phoenix has the potential to become a major player in the lucrative **fiber-optic business**. With 50 patents pending, including an automated process to build modulators – the most important component of fiber-optic net - works – Micro Photonix is close to completing its first plant and expanding its workforce. **Full production** of the modulators is **expected to begin in the first quarter of 2001**. The company will need workers with skills in fiber optics, microwave technology, high-precision manufacturing, and semiconductor fabrication.

Needing space to expand its horizons, the **world's largest guitar maker** will **move its corporate headquarters**, literally across the street, to a 70,000-square-foot building on the **Salt River Pima-Maricopa Indian Community**. Scottsdale-based **Fender Musical Instruments Corp.** currently has between 250 and 300 administrative, marketing, and accounting employees at its offices on Pima

Road. The 54-year-old company will move into a one-story office building, near Loop 101 and Chaparral Road, in **fall 2001**.

Construction

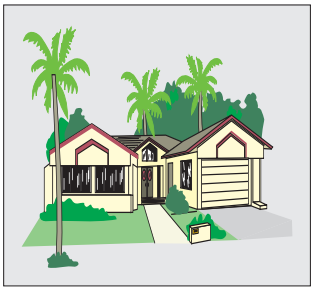
Plans for construction of **two natural gas-fired power plants** near **Gila Bend** is **spurring development** in the sleepy hamlet 50 miles southwest of downtown Phoenix. The prime target for development are 35,000 acres of the **68,000-acre Paloma Ranch**. Already investors have bought 320 acres for a water-ski park 17 miles north of Gila Bend; 209 acres for Diamond Lake Ranch, a mixed-use development featuring 200 homes, retail shops, an RV park with 800 spaces, and 35 acres of lakes; and a 500-acre tree and plant nursery and a new hotel.

Marriott Corp. is **building** Arizona's **largest resort** and conference center as part of the 5,723-acre **Desert Ridge** multi-use project in northeast Phoenix. The high-end facility, which will include a 950-room hotel, 200,000 square feet of meeting space, two 18-hole golf courses, 10 restaurants, three swimming pools and spa, will cost between an estimated $250 million and $500 million. Upon **scheduled completion in November 2002**, Marriott says the resort, located between Tatum Boulevard and 56th Street north of Deer Valley Road, will **employ 1,700 people**.

Work on **two office projects** valued at nearly $40 million will **begin in late 2000 or early 2001**. The two office projects consist of a $25 million, 120,000- to 150,000-square-foot complex of buildings at **Baseline and Cooper roads in Gilbert**, and a $13 million, 10-building complex at the 280-acre Cotton Center at **Broadway Road and 48th Street** in east Phoenix. The 26-acre Gilbert project will include high-tech and professional businesses, while it is anticipated that **400 to 500 employees of financial services, engineering and architectural companies** will occupy the 8.6-acre, 130,000-square-foot Phoenix development, called **Cotton Center Commons**, when it's complete by the end of 2001.

The $35 million **Chandler Freeways Business Park**, which will sit on the southeast corner of **Loop 202 (San Tan Freeway) and 56th Street**, is expected to be home to **between 2,000 and 3,000 high-tech and industrial workers**. Developer **Ryan Cos.** expects to begin work on the **first phase** of the 56-acre, 1 million-square-foot project by **early 2001**.

Tempe-based **Fulton Homes Corp.** expects to **start 10 new housing developments** in the metro area **in 2001** as part of plans to build 5,500 to 6,000 homes over the next 12 months. The east Valley will be home to eight of the subdivisions, including five in Chandler. Fulton Homes expects sales to exceed 1,600 next year, 60 percent above its current annual level.



The city of **Fountain Hills** has approved **two major construction projects**. The **Four Peaks Plaza** shopping center, which will be anchored by a Target, is expected to **open in March 2002**. And work is expected to **begin in 2001** on a **250-room Fountain Hills Hilton Resort**. The shopping center will be located at Shea and Saguaro boulevards, while the hotel will be at Shea and Palisades boulevards.

Passage of **Proposition 302** – which will finance an **Arizona Cardinals football stadium** and **baseball spring training facilities** in the Valley – has a number of local construction companies salivating at the chance to get a "piece of the action." Scottsdale-based **Hunt Construction Group** has been chosen as the **designer and builder** of the $331 million football edifice scheduled to open in 2004, but there will be an opportunity for a number of construction companies to be chosen for lucrative subcontracting work. **CMX Sports of Phoenix** is considered one of the leading contenders to build a spring training facility in Surprise, about 25 miles northwest of Phoenix, that will be shared by the Texas Rangers and Kansas City Royals.

Transportation, Communications, and Public Utilities

Due to the rapid growth of cable TV, telephone, and Internet services, **USWest and Cox Communications** will be filling **at least 1,000 new positions** over the **next couple of years** in **sales, installation, customer service, marketing, and computer operations**. And with turnover factored in, the companies will actually need about 2,000 workers. **Cox** is **opening a new 26-acre campus** at Deer Valley Road and 19th Avenue in north Phoenix in **January 2001**, where it will be home to 1,500 employees.

The exploding demand for communication services is fueling a **similar demand for software and hardware engineers, network specialists, and technicians** to **build the infrastructure** to support these products. One part of that infrastructure is **"telco hotels,"** which are usually former office buildings that have been converted to hold the

equipment (e.g., computer servers, fiber-optic networks) used for these services. In the Valley, four new telco hotels are planned, on top of three existing ones. One facility would be built in the **basement of the former Galleria mall** in downtown Scottsdale. Along with office space on the first through third floors and retail shops on the south side of the building, the newly named **Technology Center of Scottsdale** is expected to be **home to 1,500 employees**.

DHL Airways Inc. has opened an expanded **national customer service center and a global data center** at the Papago Park Center in Tempe. The $26 million facilities are expected to **employ more than 500 people by 2010**. DHL Airways is the U.S. subsidiary of DHL Worldwide Express, a global package-delivery service.

Southwestern Power Group II has proposed building a **$1 billion natural gas-fired power plant 10 miles south of Eloy**, which is located about 50 miles south of Phoenix off of Interstate 10. The **first phase** of the 2,000-megawatt facility, which would generate enough power for 500,000 homes, is expected to be **completed in 2003**. Construction of the facility – the 18th such plant under construction or proposed for Arizona – would **create between 300 and 400 jobs**. About 60 permanent jobs would be needed when the plant is fully operational.

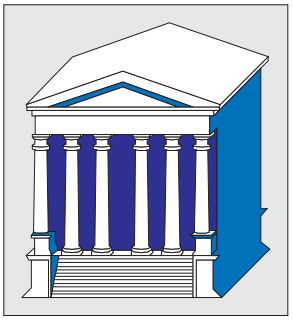
Qwest Communications announced it will **build** a 100,000-square-foot **Web-hosting operation in Phoenix** as part of a $5 billion deal with IBM to build 28 CyberCenters throughout the country. The centers will contain servers and other computer equipment to access Qwest's 25,000-mile fiber-optic network. The Phoenix-area center will **open around 2003**.

Finance, Insurance, and Real Estate

St. Louis-based **Edward Jones** plans to open its first significant operation outside of Missouri at **Arizona State University's Research Park** in Tempe. The three-building, 330,000-square-foot campus will **employ up to 1,000 people** in managerial, accounting, and information-technology jobs **when it's completed in 2005**. The **first building** will **open in the third quarter of 2001**.

Boston-based **MFS Investment Management,** the nation's oldest mutual fund company, will **open** its first **regional headquarters** outside of Boston at 24th and Peoria avenues **in Phoenix in 2001**, creating about 1,000 jobs. Customer-service workers will take calls from clients seeking account-related information.

VenServe, a California company that sets up financing for businesses' large purchases, will **locate several of its operations in Tempe**. Based in the L.A. suburb of Agoura Hills, VenServe will operate its **data storage, human resources, customer service, and direct sales units** in a 20,000-square-foot building at 2626 S. Roosevelt St. The company expects to **employ between 140 and 160 people** – primarily in clerical, customer service, and sales positions – **by 2003**.



Up to **300 customer-service jobs** will be created by the **opening of 40 full-service branch offices** of **Washington Mutual**, a Seattle-based bank that specializes in home loans. The east Valley cities of Chandler, Tempe, Mesa, and Scottsdale are expected to be the greatest beneficiaries of the expansion, which will feature offices that resemble the inside of retailers like The Gap or Nordstrom, with kiosks spread throughout the branch. The **first branches** are expected to open in the **first quarter of 2001**.

American Express Corp. announced it will build a **$170 million technology center** in the northeast Valley that will be **home to 2,000 workers**, most of whom will come from several other Valley sites. The financial-services company, which has about 9,000 Valley employees, plans to lease state land at 56th Street and Mayo Boulevard in Phoenix where it plans to build two 180,000-square-foot office buildings and a 100,000-square-foot building to be used primarily for training and conferences. American Express says the new facilities, which will **open in 2003**, will allow for some new hires.

Charles Schwab & Co. expects to **increase its Valley workforce by 1,000** by the **end of 2001**, bringing its total Arizona employment to 4,400. Most of the new jobs will involve **administrative, technical, and operational functions**, while a majority of the 3,400 workers as of November 2000 are in customer-service positions. The San Francisco-based financial services business has four offices in the Phoenix metro area, with most of its employment concentrated in the 24th Street and Camelback Road corridor. A **computer-operations center** will **open in Chandler in 2001**.

Trade

Westcor Shopping Centers of Phoenix has **three major Valley shopping projects** it expects to open within the next two years. Westcor began construction on the Valley's second-largest enclosed shopping center, **Chandler Fashion Center**, in April 2000, with an expected **completion date of October 2001**. The 1.3 million-square-foot shopping center on the southwest corner of **Chandler Boulevard and Loop 101** will include anchor tenants Nordstrom, Robinsons-May, and Dillard's. Scheduled to **open in fall 2001** will be **Scottsdale 101**, a **30-store and restaurant shopping center** at **Mayo Boulevard and the Loop 101 freeway** that will also include a multiplex movie theater. But dwarfing that project will be the 1.4-million-square-foot **Gilbert Power Center** at Williams Field Road and the alignment of the San Tan Freeway. Expected to **open in fall 2002**, the open-air shopping center will feature **50 stores and restaurants**, along with a multiplex theater.

The name of the game for successful national retailers these days is expand, expand, expand. A **number of chains** across a broad spectrum of industries have **announced plans** to do just that in the Phoenix metro area. Among these, **Lowe's Home Improvement Warehouse** will give Home Depot and other home-improvement stores stiff competition in the Valley by **opening 20 stores and employing 4,000 by 2004**. Atlanta-based **Home Depot** will open **two more Valley locations in 2001**, giving it a total of 18 stores in the metro area. And Chandler-based **Nationwide Vision** will **add four more optical-care stores** to its current 25 in the Valley by the **end of 2001**. Also, nine shops are currently being built or planned in Tucson.

Services

Three new hospitals are on the horizon in the **east Valley**, the first new major health-care facilities in nearly 20 years. San Francisco-based **Catholic Healthcare West** plans to build a **50-bed, $30 million facility in 2002 or 2003**. No site has been chosen, but the project will start with an urgent and outpatient care center, then expand to a full-fledged hospital with emergency care. Catholic Healthcare West owns Chandler Regional Hospital and St. Joseph's Hospital and Medical Center in Phoenix. Also, Mesa-based **Lutheran Healthcare Network**, which operates two other Valley hospitals, is planning a four-story, **$40 million hospital in Gilbert**. The 50- to 75-bed hospital will be located at the corner of Ray and Greenfield roads, along with three medical office buildings. A 250-bed, seven-story tower is planned in the future as Gilbert expands in size. Finally, a **$50 million hospital** is planned for **Apache Junction** in the far east Valley. **SFII Corp.**, which owns land at U.S. 60 and Goldfield Road, has submitted plans for a **three-story hospital** with an emergency room, helipad, and medical office building. Completion of the health-care facility, which is expected to **create 200 jobs**, is **planned for December 2001**.

Toyota Financial Services USA plans to **open** a **Western Region customer-service center** in the Phoenix metro area by the **end of 2001**. The facility, which will deal with collections, leasing agreements, and other administrative and customer-service functions, will **employ up to 400 people**. Most of the management positions will be filled within the company, which currently operates one service center in Cedar Rapids, Iowa.

St. Louis-based **Express Scripts**, which handles pharmacy claims and mail-order prescriptions, expects to **open a customer-service operation** in Tempe **in 2002 employing up to 700**. Jobs will be offered to both transferees from Express Scripts' seven other customer-service operations and new hires.

Government

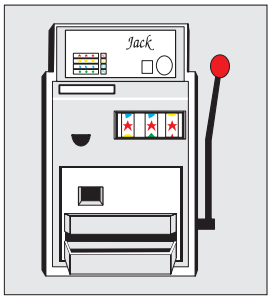
The booming economy is making it extremely difficult for Valley law-enforcement agencies to fill positions. The **Phoenix Police Department** and the **Maricopa County Sheriff's Office** are both **facing severe shortages** of qualified candidates. The Maricopa County Sheriff's Office will need **an additional 1,600 deputies and jail guards by 2004** to fill new positions and vacancies caused by retirements and resignations.

The **Federal Reserve** is building a $13 million **currency operations center** at McDowell Road and 47th Avenue in Phoenix. The cash facility, which will store and distribute cash to Arizona banks, will be a first for the 87-year-old Federal Reserve. When **completed in September 2001**, the facility is expected to **employ around 50 people**.

Tucson Metro Area

Manufacturing

Aristocrat Technologies Inc., a maker of slot machines and video-gaming devices, expects to **triple its workforce of 30 by 2002**. The Australian company also designs and develops gaming software. Salaries range from $35,000 for entry-level graphics workers to $75,000 for experienced engineers.



Cybernetic Research Laboratories expects to **add 100 skilled workers by 2001** to make several products – cable, relay and ladder racks, and computer cabinets – for a New York manufacturer that specializes in producing computer hardware equipment. Tucson-based Cybernetic, which will immediately begin producing equipment for AFCO Systems, plans to have a **new manufacturing facility by the end of 2000 or early 2001**.

As part of a $28 million expansion and upgrade of the former Burr-Brown Corp. wafer semiconductor facilities, **Texas Instruments** plans to **hire at least 150 employees** (50 electrical engineers and 100 manufacturing technicians) by the **middle of 2001**. Dallas-based Texas Instruments acquired Burr-Brown in August 2000 for $7.6 billion in stock. The 20 percent expansion of Burr-Brown's 155,000-square-foot operation at 6730 S. Tucson Blvd. is expected to yield a 60 percent increase in capacity by the first quarter of 2001.

Plastic Moldings Corp. of Cincinnati is expected to **open in February 2001** a $15 million state-of-the-art plant at the Century Park Research Center in southeast Tucson that will **employ 230 people**. The facility will make plastic moldings for high-tech hand-held devices for clients such as Motorola and Sony.

A Taiwan-based company that makes the metal chassis for digital cable converter boxes expects its **employment to triple to around 100 by October 2001**. Named after its founder, **Chenga Fwa Industrial Co.** opened a 70,000-square-foot plant in Tucson in October 2000 so that it could be closer to its primary client, Motorola, which has a manufacturing operation in Nogales, Mexico.

Construction

Three open-air retail centers, each around 400,000 square feet, are **in the works** for the Tucson metro area. **Diamond Ventures Inc.** of Tucson plans to **build two** of the outdoor malls – **Steam Pump Village in Oro Valley** (Oracle and First Avenue) and **River Crossing** at River Road and La Cholla Boulevard. **Westcor Partners** of Scottsdale has proposed to **build** an as yet **unnamed retail complex** at Campbell and Skyline. Work on both of the **Diamond projects** – which will include Harkins multiplex theaters, restaurants, retail shops, offices, and other entertainment features in a pedestrian-friendly setting (e.g., 12-foot-wide sidewalks) – is **scheduled to begin early in 2001** and be completed by the end of the year. Steam Pump Village, which will also include a 250-room hotel, will use a "Main Street" theme throughout the shopping plaza. River Crossing, which will be built in three phases, will have a modernistic look. **Westcor** will have a tougher road to gain approval for its retail center that would **include specialty stores, upscale restaurants, and a high-end grocery store** in a setting that resembles St. Phillip's Plaza in Tucson.

The **University of Arizona** has **started work** on a **23-building**, $402 million **capital-improvement project**. Among the projects planned or already under way are: a **new Student Union** and an **Integrated Learning Center**, a $60 million biomedical and biotechnology building, a $27 million renovation of the Arizona State Museum, a $60 million expansion of the Environmental and Natural Resources Building and the Chemistry Building, and several housing projects costing $89 million.

Transportation, Communications, and Public Utilities

Denver-based **WideOpenWest LLC signed a 15-year franchise agreement** in 2000 with the city of Tucson to provide fiber-optic cable TV, Internet, and telephone services for the city's residents. WideOpenWest plans to spend $150 million over the next five years to build the high-speed network, as well as eventually **employ up to 150 people** in the Tucson area.

Tucson-based **Opto Power Corp.**, which supplies several types of high-power semiconductor lasers to the telecommunications and semiconductor manufacturing industries, is in a **major growth mode**. Opto Power, which has 200 employees, added 50 positions in 2000 and **expects to continue that type of growth**. A recent corporate realignment by Opto Power's parent company, Spectra Physics of

Mountainview, Calif., could also provide additional opportunities.

Trade

One of Tucson's oldest malls is undergoing a massive transformation that will turn it into **eight to 10 Spanish-style, mini-shopping plazas**, with amenities such as restaurants, outdoor space for performing arts and exhibits, an outdoor market, artists' studios, and possibly a public library or government offices. Because of the overhaul, **El Con Mall**, on East Broadway between Jones and Dodge boulevards, will be appropriately **renamed The Plazas at El Con**. The **three-year, $50 million project** will also include construction of a **new 123,000-square-foot Home Depot**, remodeling of a 140,000-square-foot building formerly occupied by Dillard's as space for a food court and other entertainment facilities, and a **gourmet grocery store**.

Services

First Health Group Corp. is **building** an $8 million, 100,000-square-foot **high-tech imaging facility** near East Valencia and South Palo Verde roads that could **eventually house up to 1,000 workers**. The Downers Grove, Ill., company, which has 4,000 employees, plans to **initially hire 400 people** to help convert medical claim forms into digitized computer files. The company, which processes health and workers' compensation forms for some of the nation's largest employers, expects the facility to **open in March 2001**.

Balance of State

Manufacturing

One of the nation's largest producers of ice cream cones opened a 63,000-square-foot manufacturing plant near Flagstaff's Pulliam Airport in 2000 to service its West Coast customers. **Joy Cone Co.** of Hermitage, Pa., initially employed about 20 workers, but **expects to hire three times as many people by the middle of 2001**.

A **concrete manufacturing plant** and about **100 permanent jobs** will be coming to the **Interstate 40 Industrial Corridor**, 20 miles **southwest of Kingman**, thanks to a vote by Mohave County supervisors. The Board of Supervisors approved a resolution allowing the county's Industrial Development Authority to issue $20 million in bonds to build the 75,000-square-foot **Enviroc Inc.** plant. In addition to the permanent jobs, **400 construction jobs** will be **needed for about a year** when work begins in November 2000.

Mining

An international oil and gas exploration company wants to **move its corporate headquarters** from Texas **to Prescott**. Based in Houston and Dallas, **Matco Inc.** wants to **build a 300,000- square-foot office**, plus a helipad and several homes. Matco, which currently has a field office with 16 employees in Prescott, expects the headquarters would **employ up to 375 people**. The 23-year-old company, which has operations throughout the Middle East, had tried to move to Prescott in 1999, but was unable to secure the land.

Construction

By a 55-45 margin, **Prescott Valley** voters approved a referendum that will allow rezoning of 1,243 acres for a **3,400-home subdivision** and 190-acre golf course. The **Glassford Hill project** is expected to **take 12 to 17 years to complete**. **Universal Homes** is the developer.

Approval of a half-cent sales tax increase by **Yuma County** voters in September 2000 provided **$57.6 million for court-related construction** over the **next eight years**. Among the projects planned are a 72-bed Juvenile Detention facility, a Juvenile Court and administration building, a court annex for Yuma County Superior and Yuma Justice courts, and a 300-space parking garage.

Trade

Home Depot will build a 105,000-square-foot store in **Lake Havasu City** as part of a planned retail power center at Airport Centre west of State Route 95. The home-improvement store, which will **create 200 jobs**, could open as early **fall 2001**.

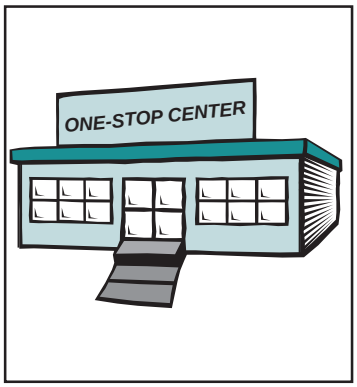
Services

Aegis Communications Group Inc. is expanding its **Sierra Vista call center**, **adding 200 employees**. The expansion, which will bring Aegis' total employment to around 800, is due primarily to its financial services customers, propelled by work from American Express.

Work is under way on a **1,100-bed medium-security private prison** about 20 miles southwest of Kingman on Interstate 40 near the Griffith Energy Project. The $35 million **Black Mountain Correctional Facility** is expected to **open in early 2002**, **creating about 400 jobs** paying a minimum of $10 an hour. Hiring could begin as early as spring 2001.

One-Stop Career Centers

Far and away the single best source for job-search assistance will be your local One-Stop Career Center. Available in all states, these facilities provide a complete range of services and access to the primary information needed by job seekers. Via the Internet, your local One-Stop Career Center can provide access to job banks, Sunday newspaper want-ads, names and addresses of potential employers, and occupational wage information. Career-planning assistance, resume-writing services and, for those who qualify, job-training opportunities are also available. To locate the nearest One-Stop facility, contact a Job Service office for directions. Job Service offices are listed in the telephone book's blue pages under "State Government." Arizona has One-Stop facilities available in every county and several offices in metropolitan areas. All services are free.



Libraries

Local libraries can provide a wealth of labor market information and often have telephone books and Sunday newspaper editions of large U.S. cities. The Yellow Pages can be used to identify potential employers by type of business. Compilations of company profiles are published by market-research firms from around the country and are usually organized by product or service and geographical area. Similar information is contained in publications produced primarily for investment research and often includes the names of top executives, revenue data, principal products and services, and company performance. Finally, most libraries now offer computer services, including access to the Internet, at little or no cost. Through compact discs, bulletin boards, data bases, and on-line services (e.g., America Online), computers can provide access to a wealth of resources, including associations, job listings, and direct links to companies.

Colleges

Another valuable resource for job seekers are career centers maintained at many colleges and universities. While these centers primarily serve students, many of their services are available to the public, as well. Career counseling centers at the community colleges, in particular, are valued resources for many successful job seekers. Arizona community colleges are located in all but a few of the state's 15 counties, with many offering testing services and database access at little or no cost to the user. Community colleges, as well as other educational institutions, can be found in the Yellow Pages under "Schools." Also, the *Arizona College and Career Guide* offers a complete listing of private and public schools at a minimal cost (see "Periodicals," below).

Newspapers, Periodicals

Newspapers can be a valuable resource providing information about the local economy. In addition to classified ads, which provide a comprehensive list of job openings, newspapers document company expansions, openings, and layoffs, as well as provide general information about trends and life in the local community. Sunday editions generally provide the most information about job openings. In fact, the state's largest daily, *The Arizona Republic*, publishes its Sunday classifieds on its Internet page, located at: http://www.azcentral.com. Table 1 on the following page lists Arizona's daily newspapers and their phone numbers.

The Arizona College and Career Guide, a comprehensive guide to programs of study offered by public and private postsecondary schools in Arizona, is available for $5 from the Arizona Commission for Postsecondary Education, 2020 N. Central Ave., Suite 275, Phoenix, 85004. Phone: (602) 229-2591.

Arizona Community Profiles, produced annually by the Arizona Department of Commerce, provides two-page summaries of socioeconomic and demographic information on more than 145 Arizona communities. Individual profiles are available at no cost from the Arizona Department of Commerce, 3800 N. Central Ave., Suite 1500, Phoenix, 85012. Phone: (602) 280-1321.

Arizona Economic Trends is a quarterly newsletter covering employment and labor issues affecting Arizona and the nation. One copy of each issue is available at no cost from the Arizona Department of Economic Security (DES), Research Administration. See page *i* for address and phone number.

The *Arizona Industrial Directory*, produced biennially by the Phoenix Chamber of Commerce, lists more than 5,000 manufacturers and wholesalers in Arizona. The publication costs $90 and can be ordered from the Phoenix Chamber of Commerce, 34

Table 1

Arizona Daily Newspapers

Phoenix Metro Area	All Other Areas
The Arizona Republic Outside Phoenix MA - (800) 332-6733; Inside Phoenix MA - (602) 444-8000	*Arizona Daily Sun* (Flagstaff) (520) 556-2298
The Tribune (Mesa, Tempe, Scottsdale, and Chandler editions) (480) 898-6500	*The Prescott Courier* (520) 445-6020
Daily News-Sun (Sun City) (623) 977-8347	*The Yuma Daily Sun* (520) 783-3333
Tucson Metro Area	*Sierra Vista Herald / Bisbee Daily Review* (520) 458-9440
The Arizona Daily Star / Tucson Citizen Outside State - (800) 695-4492); Inside State - (520) 573-4511	*The Kingman Daily Miner* (520) 753-6397
	Casa Grande Dispatch (520) 426-3814

W. Monroe St., Phoenix, 85003. Phone: (602) 254-5521.

The Business Journal's Top 25 Lists, produced annually, provides "Top 25" lists for more than 100 business categories in the Phoenix metro area, including the largest employers (by employee size and revenue) in a wide variety of industries. The publication is free to subscribers of *The Business Journal*, a weekly business periodical, or costs about $36.50 for nonsubscribers. Contact *The Business Journal*, 3030 N. Central Ave., Phoenix, 85012. Phone: (602) 230-8400.

Guide to Establishing a Business in Arizona is a free publication available from the Arizona Department of Commerce, 3800 N. Central Ave., 16th Floor, Phoenix, 85012. Phone: (602) 280-1480.

The two-part *Major Employers Guide* series, produced by DES, Research Administration, lists the largest employers in the Phoenix, Tucson, Flagstaff, and Yuma metro areas. One copy of each publication – which also provides addresses, phone numbers, and street-location maps – is free. See page *i* for address and phone number.

"Tips for Finding the Right Job" is a 28-page publication that includes tips on evaluating your interests and skills, finding job information, writing resumes and application letters, preparing job interviews, planning your time, and taking tests. Available for free through the U.S. Government Bookstore, Norwest Banks Building, 201 W. 8th St., Pueblo, CO 81003. Phone: (719) 544-3142.

"Smart Start Your Arizona Business" is a step-by-step guide for planning, starting, and operating a business. Clear explanations of laws and taxes, requirements, checklists, sample forms, and free publication lists are provided in this 300-page publication. Available through the Phoenix Chamber of Commerce ($20 for members; $25 for nonmembers), 201 N. Central Ave., 27th Floor, Phoenix, Az 85073. Phone: (602) 254-5521.

The *Employer Wage Survey* is an annual estimate of wages for more than 500 occupations in Arizona as determined by the Occupational Employment Statistics survey. Estimates are provided for Arizona; the Phoenix-Mesa, Tucson, Flagstaff, and Yuma metropolitan areas; and the Balance of State. One copy of is available at no cost from the Arizona Department of Economic Security (DES), Research Administration. See page *i* for address and phone number.

Chambers of Commerce

Another source of information are local Chambers of Commerce, which often have lists of businesses, as well as other demographic and economic data. The Phoenix metropolitan area has Chamber branches in about 10 cities and is home to the Arizona Chamber of Commerce. For an address or phone number of a local branch of the Chamber of Commerce, contact the Arizona Department of Commerce, Economic Development Division. Phone: (602) 280-8130.

Note: Beginning June 2001, most of rural Arizona will be switched from the 520 telephone area code to a new 928 area code. Areas currently in the 520 area code that will remain in the 520 area code include Pima County (Tucson metro area), Cochise County, Santa Cruz County, and Pinal County. Check with telephone information if your call does not go through to a number listed in the 520 area code.

Table 2

Selected Internet Sites Useful to Arizona Job Seekers

(All addresses are preceded by "http://")

Licensing Requirements, Boards (occupations and businesses requiring licenses)

- Arizona Dept. of Revenue (www.revenue.state.az.us/license/subject.htm)
- State of Arizona Overseeing Boards (www.state.az.us/licensing.html)

Economic/Labor Market Data (wages, occupational and industry employment)

- Arizona Dept. of Economic Security, Research Administration (www.de.state.az.us/links/economic/webpage)
- Arizona State University, College of Business (www.cob.asu.edu/seid/)
- University of Arizona, College of Business and Public Administration (www.bpa.arizona.edu/research_n.html)
- U.S. Dept. of Labor, Bureau of Labor Statistics (stats.bls.gov)
- Other Federal Statistics Agencies (stats.bls.gov/oreother.htm)

Job Search

- Arizona School Districts (www.ade.state.az.us/schools/schools/districts.htm)
- Arizona's Job Bank (www.jobsearch.org)
- Arizona One-Stop Career Center (www.de.state.az.us/oscc/)
- Links to Arizona newspapers and their current want-ads (www.newslink.org/aznews.html)
- Employment with the State of Arizona (www.hr.state.az.us/employment/index.htm)

Career Information

- Arizona's Job Bank (www.jobsearch.org)
- America's Career InfoNet (www.acinet.org/acinet)
- America's Learning Exchange (www.alx.org)
- Vocational and Adult Education (www.ed.gov/offices/OVAE)

Community Information

- Arizona Community Profiles (www.commerce.state.az.us/web_maps/htmlpage/communit.htm)
- Intercity Cost of Living Comparisons (www.accra.org/edu_prof/pubs/coli_sample.htm)
- School Report Cards (www.ade.state.az.us/schools/schools/districts.htm)
- Vital Statistics (www.hs.state.az.us/plan/ohpes.htm)

Employment Security - Labor
Labor Market Information Publications
Site Code 733A
P.O. Box 6123
Phoenix, AZ 85005

Official Business
Penalty for Private Use, $300

Address Correction Requested

First Class Mail
Postage & Fees Paid
Employment Security - Labor
G-12

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